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Cytotoxic Basic List

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<th>FRUITS</th>
<th>VEGETABLES</th>
<th>PROTEINS</th>
<th>SUGARS</th>
<th>ADDITIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple</td>
<td>Corn</td>
<td>Chicken</td>
<td>Sugar, Cane</td>
<td>MSG</td>
</tr>
<tr>
<td>Banana</td>
<td>Onion</td>
<td>Egg, Whole</td>
<td>Grains</td>
<td>Nutrasweet</td>
</tr>
<tr>
<td>Grape, Seedless</td>
<td>Potato, White</td>
<td>Milk, Cow</td>
<td>Flour, White</td>
<td>Spices/Herbs</td>
</tr>
<tr>
<td>Orange</td>
<td>Tomato</td>
<td>BEVERAGES</td>
<td>Oat</td>
<td>Chocolate</td>
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<tr>
<td>Legumes</td>
<td>Rice</td>
<td>Coffee</td>
<td>Tea</td>
<td>Wheat, Whole</td>
</tr>
<tr>
<td>Soybean</td>
<td></td>
<td></td>
<td></td>
<td>Yeast</td>
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FRUITS: Apple, Banana, Grape, Orange
VEGETABLES: Corn, Onion, Potato, Tomato
PROTEINS: Chicken, Egg, Whole, Egg, Whole
SUGARS: Sugar, Cane, Grains, Nutrasweet
ADDITIVES: MSG, Nutrasweet, Spices/Herbs, Oat, Chocolate, Rice, Wheat, Whole, Yeast
Cytotoxic Standard List 1

<table>
<thead>
<tr>
<th>FRUITS</th>
<th>VEGETABLES</th>
<th>NUTS AND SEEDS</th>
<th>SPICES/HERBS</th>
<th>ADDITIVES</th>
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<tbody>
<tr>
<td>Apple</td>
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<td>Chocolate</td>
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<tr>
<td>Banana</td>
<td>Avocado</td>
<td>Cashew</td>
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<td>Blueberry</td>
<td>Bean, String</td>
<td>Pecan</td>
<td>Pepper, Black</td>
<td>Dye, Blue</td>
</tr>
<tr>
<td>Cantaloupe</td>
<td>Broccoli</td>
<td>BEVERAGES</td>
<td>Vanilla</td>
<td>Dye, Green</td>
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<tr>
<td>Coconut</td>
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<td>Grape, Seedless</td>
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<td>Tea</td>
<td>NUTS AND SEEDS</td>
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<td>Pineapple</td>
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<td>Codfish</td>
<td>Tea</td>
<td>Sulfur Dioxide</td>
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<td>Strawberry</td>
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<td>Salmon</td>
<td>SUGARS</td>
<td>Tobacco</td>
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<td>Watermelon</td>
<td>Onion</td>
<td>Shrimp</td>
<td>Fructose</td>
<td>GRAINS</td>
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<td>LEGUMES</td>
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<td>Honey</td>
<td>Corn</td>
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<tr>
<td>Bean, Navy</td>
<td>Pepper, Green</td>
<td>Egg, Whole</td>
<td>Sugar, Cane</td>
<td>Flour, White Wheat</td>
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<td>Bean, Pinto</td>
<td>Potato, Sweet</td>
<td>Cheese, Cheddar</td>
<td>Sugar, Maple</td>
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<td>Peanut</td>
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<td>OTC MED.</td>
<td>Oats</td>
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<tr>
<td>Soybean</td>
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<td>Squash</td>
<td>Milk, Cow</td>
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Cytotoxic Standard List 2

<table>
<thead>
<tr>
<th>FRUITS</th>
<th>VEGETABLES</th>
<th>PROTEINS</th>
<th>SPICES/HERBS</th>
<th>ADDITIVES</th>
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<tbody>
<tr>
<td>Apricot</td>
<td>Bean Sprouts</td>
<td>Bacon</td>
<td>Brazil</td>
<td>Carcinol Oil</td>
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<tr>
<td>Blackberry</td>
<td>Beet</td>
<td>Casien</td>
<td>Bay Leaves</td>
<td>Brazil</td>
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<tr>
<td>Cherry</td>
<td>Brussel Sprouts</td>
<td>Catfish, Channel</td>
<td>Carb Powder</td>
<td>Flaxseed</td>
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<td>Cranberry</td>
<td>Catsum</td>
<td>Clam</td>
<td>Cayenne Pepper</td>
<td>Pistachio</td>
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<tr>
<td>Date</td>
<td>Chili Pepper</td>
<td>Crab</td>
<td>Cinnamon</td>
<td>Poppyseed</td>
</tr>
<tr>
<td>Grape, Concord</td>
<td>Eggplant</td>
<td>Duck</td>
<td>Ginger</td>
<td>Safflower Oil</td>
</tr>
<tr>
<td>Honeydew Melon</td>
<td>Okra</td>
<td>Flounder</td>
<td>Horseradish</td>
<td>Sesame Seeds</td>
</tr>
<tr>
<td>Lime</td>
<td>Onion, Green</td>
<td>Haddock</td>
<td>Licorice</td>
<td>Sunflower Seeds</td>
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<tr>
<td>Nectarine</td>
<td>Pumpkin</td>
<td>Ham</td>
<td>Nutmeg</td>
<td>Walnuts</td>
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<tr>
<td>Plum</td>
<td>Radish</td>
<td>Lamb</td>
<td>Oregano</td>
<td>GRAINS</td>
</tr>
<tr>
<td>Pomegranate</td>
<td>Tump Greens</td>
<td>Liver, Beef</td>
<td>Paprika</td>
<td>Amaranth</td>
</tr>
<tr>
<td>Raspberry</td>
<td>Yam</td>
<td>Liver, Chicken</td>
<td>Peppermint</td>
<td>Barley</td>
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<tr>
<td>Tangerine</td>
<td>Zucchini</td>
<td>Lobster</td>
<td>Rosemary</td>
<td>Buckerheat</td>
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<tr>
<td>BEVERAGES</td>
<td>ADDITIVES</td>
<td>Oyster</td>
<td>Sage</td>
<td>Malt</td>
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<tr>
<td>Beer</td>
<td>Caffeine</td>
<td>Perch, Ocean</td>
<td>LEGUMES</td>
<td>Milllet</td>
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<td>Peps/Coca-Cola</td>
<td>Gelatin</td>
<td>Red Snapper</td>
<td>Bean, Lima</td>
<td>Popcorn</td>
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<tr>
<td>Dr. Pepper</td>
<td>Glycerol</td>
<td>Sardine</td>
<td>Lentils</td>
<td>Quinoa</td>
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<tr>
<td>Sugars</td>
<td>Scallop</td>
<td>Pea, Chick</td>
<td>Rice, Wild</td>
<td>Lipid</td>
</tr>
<tr>
<td>Dextrose</td>
<td>Sol</td>
<td>Tapeoica</td>
<td>Yogurt</td>
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</tbody>
</table>

Bio-Center Laboratory (BCL)

Introduction to Our Services

Bio-Center Laboratory (BCL) was established in 1975 and has dedicated itself to providing accurate clinical assays focusing on nutritional medicine. We specialize in a wide variety of nutritional tests including many vitamins, minerals, RBC fatty acids and amino acids. We also test for urine pyrolyses, whole blood histamine, cytotoxic food sensitivities and many others.

Client service representatives are available Monday through Thursday from 8 AM to 5 PM and Friday 9 AM to 4 PM CST. Our toll free telephone number is 800-494-7785. For local calls, please call 316-684-7784. Our fax number is 316-682-2062.

Licensure / Certification

CLIA 17D0648333

Medicare 008052

Federal ID 48-0840415

Proficiency Testing


American Association of Bioanalysts: Chemistry, Parasitology, Hematology, Urinalysis, Special Chemistries and Tumor Markers surveys.

Centre de Toxicologie du Quebec: Mineral surveys.

Policies

• Test Cancellation: A test may be cancelled at any time prior to reporting the result and you will be charged a $40 cancellation fee. The request to cancel must be in writing, signed and faxed to us at 316-682-2062.

• Repeat Testing: In most cases, unusual test results are automatically repeated by the laboratory and noted as such on the final report. If you question a result, please call the laboratory and we will further evaluate the result and repeat the test if necessary, at no charge, provided that we have sufficient quantity of specimen. For the most part, specimens are retained for at least one month.

• Unacceptable Specimens: If we determine that a specimen is unacceptable, we will call you with our concerns. Please review, “Causes for Rejection,” accompanying each assay.

• Turn Around Time (TAT): Vitamin C assays are performed daily. The usual TAT for all other assays is ten days or less.

• Fees are subject to change without prior notification. However, we will make every effort possible to notify you when the change occurs.

• Client Billing

316.682.3100 | 800.447.7276
3100 N. Hillside | Wichita, KS 67219
Client Billing Options
Option 1 -- Payment Included with Specimen Submittal: Payment from the patient or medical facility accompanies the specimen shipment. Patient’s full name, address, date of birth, gender, and telephone number are required for processing the payment. Doctor’s orders, if applicable, must be included with the payment and a properly filled out requisition. All test results will be sent to the ordering physician. Therefore, the physician’s full name & degree (MD, ND, OD, etc…), address, telephone number (and fax number, if faxed reports are also desired) must be submitted with all specimens. Bio-Center Laboratory will send a receipt to the patient for insurance reimbursement.

Option 2 -- Physician/Clinic/Reference Lab Billing: All new accounts must send a check or valid credit card information with shipment of the first specimen. For future shipments, BCL will invoice the referring facility each month (as needed) for each assay ordered. Payment is due within 30 days of invoice. The referring facility or physician’s full name & degree (MD, ND, OD, etc…), the physician/facility’s address and telephone number (include fax number, if faxed reports are also desired) must be submitted with all specimens. Bio-Center Laboratory will send a receipt to the referring facility/physician. Note: If neither box is checked, the ordering physician will be billed and will be responsible for payment.

Drawing and Processing Specimens
• General fasting specimens require a 12 – 14 hours fast. Drinking water is allowed during a general fast.
• If fasting for a cytotoxic food sensitivity test, the fast prohibits the use of tobacco products. Bottled water is the only beverage allowed during the fast. The patient’s teeth should not be brushed with toothpaste brushing with bottled water is acceptable) the morning of the collection. BCL must be notified 1 – 2 days prior to collection of cytotoxic food sensitivity specimens for approval of specimen arrival dates. Specimen must be shipped same day as collection, Monday - Wednesday only.
• Serum specimens require that whole blood in the amount of 2 ½ times the required amount of serum be drawn. For example, if 2 mL serum is required, then at least 5 mL whole blood needs to be drawn. Individual patient hematocrits may affect the amount to be drawn. Unless noted, all serum specimens should be separated from cells by centrifugation within 45 minutes of venipuncture.
• Specimens drawn in ACD, EDTA, or heparin tubes contain anticoagulant. To prevent the specimen from clotting, the contents of these tubes should be mixed thoroughly immediately after being drawn by inverting the tube gently at least six times.
• All volumes listed are pipettable volumes (i.e., extra volume must be included to allow for pipetting of specimen).
• Minimum volume specimens allow the sample to be tested once with no option for repeat analysis.
• Preferred volumes allow specimens to be tested several times. These volumes should always be sent unless difficulty in obtaining specimen is incurred, and use of minimum volume is the only option available.
• Specimens that need to be protected from freezing should never be placed directly next to an ice pack, or cells will burst (hemolysis will result), and the specimen will be unusable. To protect these specimens from freezing, separate the specimen from the ice pack with 1/2 inch of padding (such as bubble wrap or paper towels). Shipping containers with unfrozen whole blood specimen should be tightly packed to prevent jostling during shipping. Add newspaper or other padding as needed.
• When storage instructions state specimen is to be frozen, the specimen should be frozen and then later shipped with the (frozen) ice pack included in our kits. Specimens shipped in this manner will arrive in a cold or semi-frozen condition. No additional ice packs are needed. If dry ice is required for shipment of any specimen, instructions will state this requirement.
• Light-protected specimens should be placed in an amber plastic transport tube. If using a clear or opaque plastic transport tube, wrap foil around the tube.
• Centrifuge time is 10 minutes at approximately 3000 rpm.

Vitamin C Screen, Urine
CPT 81099
Synonyms Urine C
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL urine; light protected
Minimum Volume 0.5 mL
Collection Container Clean container
Transport Container Plastic transport tube; light protected
Storage & Transport Instructions Freeze within 30 minutes of collection; keep frozen
Causes for Rejection specimen not kept frozen; specimen not protected from light

Vitamin D, 25-Hydroxy
CPT 82306
Synonyms 25-Hydroxycalciferol; 25-OH-D
Patient Preparation None
Special Instructions None
Specimen Volume 1 mL serum; light protected
Minimum Volume 0.5 mL
Collection Container SST or red-stopper tube
Transport Container Amber plastic transport tube
Storage & Transport Instructions Refrigerate or Freeze
Causes for Rejection Gross hemolysis

Vitamin E
CPT 84446
Synonyms Alpha Tocopherol
Patient Preparation None
Special Instructions None
Specimen Volume 1 mL serum; light protected
Minimum Volume 0.3 mL
Collection Container SST or red-stopper tube
Transport Container Amber plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection Gross hemolysis

Yeast Species (Oral)
CPT 87201
Patient Preparation None
Special Instructions Swish 10 mL sterile water in mouth for 1 minute then spit back into collection container
Specimen Volume 10 mL mouth wash
Minimum Volume Same
Collection Container Sterile collection cup
Transport Container Sterile collection cup
Storage & Transport Instructions Refrigerate
Causes for Rejection Frozen specimen

Zinc, RBC
CPT 84630
Synonyms Serum Zn
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 1 mL
Collection Container Trace element non-additive tube
Transport Container Metal-0.5 plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection Moderate or excessive hemolysis

Zinc, Serum
CPT 84630
Synonyms Serum Zn
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 1 mL
Collection Container Trace element non-additive tube
Transport Container Metal-0.5 plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection Moderate or excessive hemolysis
Vitamin B3
CPT 84091
Synonyms Niacinamide; Pyridine
Patient Preparation None
Special Instructions None
Specimen Volume 4 mL Heparin whole blood; light protected
Minimum Volume 2 mL
Collection Container Heparin tube
Transport Container Amber plastic transport tube
Storage & Transport Instructions Freeze
Causes for Rejection Gross hemolysis

Vitamin B5
CPT 84091
Synonyms Pantothenic acid
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL Heparin whole blood; light protected
Minimum Volume 1 mL
Collection Container Heparin tube
Transport Container Amber plastic transport tube
Storage & Transport Instructions Refrigerate. DO NOT FREEZE!
Causes for Rejection Frozen specimen

Vitamin C, Plasma
CPT 82180
Synonyms Plasma Ascorbic Acid
Patient Preparation None
Special Instructions Pour an aliquot of sodium citrate into the specimen to prevent the specimen from clotting. In addition, the specimen must be separated immediately after collection. Ratio of plasma to 3% metaphosphoric acid (MPA) must be maintained, so care must be taken to add exact amount of plasma to the provided 4.5 mL aliquot of MPA. Plasma-MPA specimen is stable at least 3 months if kept frozen.
Specimen Volume 3 mL EDTA or Heparin plasma added to 4.5 mL cold MPA. Mix vigorously.
Minimum Volume 2 mL plasma added to 3 mL (adjusted volume) cold MPA. If minimum volumes of plasma & MPA are used, it must be noted on the requisition as (2 mL plasma + 3 mL MPA used).
Collection Container EDTA or Heparin tube
Transport Container Plastic transport tube
Storage & Transport Instructions Refrigerate
Causes for Rejection Gross hemolysis; insufficient specimen; specimen not frozen; incorrect ratio of plasma to MPA

Vitamin C, Plasma - Post IVC Specimen
CPT 82180
Synonyms Plasma Ascorbic Acid
Patient Preparation None
Special Instructions Note on requisition grams of IVC given. Draw specimen from site on opposite arm used for IVC immediately after completed infusion. Separate plasma from cells and process specimen immediately after collection. Ratio of plasma to 3% metaphosphoric acid (MPA) must be maintained, so care must be taken to add exact amount of plasma to the provided 4.5 mL aliquot of MPA. Plasma-MPA specimen is stable at least 3 months if kept frozen.
Specimen Volume 3 mL EDTA or Heparin plasma added to 4.5 mL cold MPA. Mix vigorously.
Minimum Volume 1 mL plasma added to 1.5 mL (adjusted volume) cold MPA. If minimum volumes of plasma & MPA are used, it must be noted on the requisition as (1 mL plasma + 1.5 mL MPA used).
Collection Container EDTA or Heparin tube
Transport Container Plastic transport tube
Storage & Transport Instructions Refrigerate
Causes for Rejection Frozen specimen

Specimen Submittal and Shipping
- REQUIRED: All specimen tubes and slides must be labeled with the patient’s name & name of test being requested, and must be accompanied by a completed requisition for testing. Required information on the requisition consists of the following: patient’s name; patient’s date of birth and gender; date & time of specimen collection. The test is ordered by a physician, the physician’s name, physician’s address and phone number (& fax number, if applicable) are also required. Use an “X” to mark the square in front of the test being requested. Failure to meet these minimum requirements may be cause for rejection of specimen.
- BCL does not require a physician’s order for laboratory testing, however a physician’s order is required in order to file services with Medicare and other health insurance providers. Patient-ordered test results will be sent to the patient. Results of testing ordered by a physician will be sent directly to the physician. Results will not be sent to a patient unless requested by the ordering physician. Diagnosis should be printed legibly. Also include the numerical ICD-9 code if the patient is sending payment and wishes to receive a receipt for insurance reimbursement, or if BCL is to file services with Medicare for covered services.
- In case of leakage during shipping, all specimens should be transported within a sturdy plastic bag with absorbent material placed next to the specimen. The specimen bag and frozen ice pack (if required) should then be sealed in the bubble bag provided (bubble bag not required for specimens shipped in styrofoam boxes) and then placed in a sturdy outer container or box for transport.
- Note: Specimen must be shipped Monday – Thursday by FedEx overnight delivery. The lab is closed on weekends and holidays. Avoid shipping specimens around these days. Place the box containing the specimen inside the FedEx Clinical Pak provided. Write your name and address in the “From” section on the prepaid label. Keep the orange receipt copy for your records. You may drop off the package at any FedEx or FedEx Kinko’s location. For FedEx shipping questions, call 1-800-GOFEDEX if you are located outside of the Continental United States, you must make your own shipping arrangements.

**CAUSES FOR REJECTION:** Specimens not labeled with date and name of patient & test; requisition not completed properly; improper specimen drawn (example: plasma specimen sent when serum is specified); specimen maintained or received at improper temperature; inadequate or inappropriate volume. Additional causes for rejection may be listed under individual test information.
### Thyroid Profiling

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<th>Fee</th>
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<td>TSH</td>
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<tr>
<td>Free (FT3)</td>
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<tr>
<td>Free (FT4)</td>
<td>164</td>
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<table>
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<tr>
<th>Test</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thyroid Profile (TSH, FT3, FT4)</td>
<td>263</td>
</tr>
<tr>
<td>Thyroid Antibodies</td>
<td>234</td>
</tr>
</tbody>
</table>

### Vitamin A
- **CPT:** 84590
- **Pathways:** Retinol
- **Patient Preparation:** None
- **Special Instructions:** None
- **Specimen Volume:** 1 mL serum; light protected
- **Minimum Volume:** 0.2 mL
- **Collection Container:** SST or red-stopper tube
- **Transport Container:** Amber plastic transport tube
- **Storage & Transport Instructions:** Refrigerate or freeze
- **Causes for Rejection:** Gross hemolysis

### Vitamin A, C, E Mini Profile
- **CPT:** 84590, 8180, 84446
- **Pathways:** Antioxidant Mini Profile
- **Patient Preparation:** None
- **Special Instructions:** See instructions for vitamins A, E & Plasma C.
- **Specimen Volume:** 1 mL serum; light protected
- **Minimum Volume:** 0.2 mL
- **Collection Container:** SST or red-stopper tube
- **Transport Container:** Amber plastic transport tube
- **Storage & Transport Instructions:** Refrigerate or freeze
- **Causes for Rejection:** Hemolysis

### Vitamin A, E, Beta Carotene, Lutein, Lycopene Profile
- **CPT:** 84590; 84446; 82380; 82491 (2)
- **Pathways:** Lipid Soluble Antioxidant Profile
- **Patient Preparation:** None
- **Special Instructions:** See instructions for vitamins A, E & Plasma C.
- **Specimen Volume:** 3 mL serum; light protected
- **Minimum Volume:** 1 mL
- **Collection Container:** SST or red-stopper tube
- **Transport Container:** Amber plastic transport tube
- **Storage & Transport Instructions:** Refrigerate or freeze
- **Causes for Rejection:** Hemolysis

### Vitamin B Assessment Profile
- **CPT:** 84425, 84252, 84091, 84207
- **Pathways:** Includes Vitamin B1, B2, B3, B5, B6
- **Patient Preparation:** None
- **Special Instructions:** See instructions for vitamins B1, B2, B3, B5, B6

### Vitamin B1
- **CPT:** 84425
- **Pathways:** Riboflavin
- **Patient Preparation:** None
- **Special Instructions:** None
- **Specimen Volume:** 1 mL serum; light protected
- **Minimum Volume:** 2.0 mL
- **Collection Container:** Heparin tube
- **Transport Container:** Amber plastic transport tube
- **Storage & Transport Instructions:** Refrigerate; DO NOT FREEZE!
- **Causes for Rejection:** Frozen specimen

### Vitamin B2
- **CPT:** 82607
- **Pathways:** Cobalamin
- **Patient Preparation:** None
- **Special Instructions:** None
- **Specimen Volume:** 1 mL serum; light protected
- **Minimum Volume:** 0.4 mL
- **Collection Container:** SST or red-stopper tube
- **Transport Container:** Amber plastic transport tube
- **Storage & Transport Instructions:** Refrigerate or freeze
- **Causes for Rejection:** Hemolysis

### Vitamin B12
- **CPT:** 82607
- **Pathways:** Folate
- **Patient Preparation:** None
- **Special Instructions:** None
- **Specimen Volume:** 1 mL serum; light protected
- **Minimum Volume:** 0.2 mL
- **Collection Container:** SST or red-stopper tube
- **Transport Container:** Amber plastic transport tube
- **Storage & Transport Instructions:** Refrigerate or freeze
- **Causes for Rejection:** Hemolysis

### Vitamin B12, Folate Profile
- **CPT:** 84590; 8180; 82607; 82746
- **Pathways:** Vitamin B Assessment Profile
- **Patient Preparation:** None
- **Special Instructions:** See instructions for vitamins B1, B2, B3, B5, B6
- **Specimen Volume:** 1 mL serum; light protected
- **Minimum Volume:** 1 mL
- **Collection Container:** SST or red-stopper tube
- **Transport Container:** Amber plastic transport tube
- **Storage & Transport Instructions:** Refrigerate or freeze
- **Causes for Rejection:** Gross hemolysis

### Vitamin B6 Assessment Profile
- **CPT:** 84252
- **Pathways:** Pantothenic Acid
- **Patient Preparation:** None
- **Special Instructions:** None
- **Specimen Volume:** 1 mL serum; light protected
- **Minimum Volume:** 2.0 mL
- **Collection Container:** Heparin tube
- **Transport Container:** Amber plastic transport tube
- **Storage & Transport Instructions:** Refrigerate; DO NOT FREEZE!
- **Causes for Rejection:** Frozen specimen

### Vitamin B6, Folate Profile
- **CPT:** 82607; 82746
- **Pathways:** Folate
- **Patient Preparation:** None
- **Special Instructions:** None
- **Specimen Volume:** 1 mL serum; light protected
- **Minimum Volume:** 0.4 mL
- **Collection Container:** SST or red-stopper tube
- **Transport Container:** Amber plastic transport tube
- **Storage & Transport Instructions:** Refrigerate or freeze
- **Causes for Rejection:** Hemolysis

### Vitamin C, E, Beta Carotene, Lutein, Lycopene Profile
- **CPT:** 84590; 84446; 82380; 82491
- **Pathways:** Lipid Soluble Antioxidant Profile
- **Patient Preparation:** None
- **Special Instructions:** See instructions for vitamins A, E & Plasma C.
- **Specimen Volume:** 3 mL serum; light protected
- **Minimum Volume:** 1 mL
- **Collection Container:** SST or red-stopper tube
- **Transport Container:** Amber plastic transport tube
- **Storage & Transport Instructions:** Refrigerate or freeze
- **Causes for Rejection:** Gross hemolysis

### Vitamin D Assessment Profile
- **CPT:** 84425, 84252, 84091, 84207
- **Pathways:** Includes Vitamin B1, B2, B3, B5, B6
- **Patient Preparation:** None
- **Special Instructions:** None
- **Specimen Volume:** 1 mL serum; light protected
- **Minimum Volume:** 0.2 mL
- **Collection Container:** SST or red-stopper tube
- **Transport Container:** Amber plastic transport tube
- **Storage & Transport Instructions:** Refrigerate or freeze
- **Causes for Rejection:** Gross hemolysis

### Vitamin D, Folate Profile
- **CPT:** 82607; 82746
- **Pathways:** Folate
- **Patient Preparation:** None
- **Special Instructions:** None
- **Specimen Volume:** 1 mL serum; light protected
- **Minimum Volume:** 0.4 mL
- **Collection Container:** SST or red-stopper tube
- **Transport Container:** Amber plastic transport tube
- **Storage & Transport Instructions:** Refrigerate or freeze
- **Causes for Rejection:** Hemolysis
Trace Elements – Urine, Post Chelation UMEP
CPT 82108, 82310, 82300, 82495, 82525, 83540, 83735, 83785, 83655, 84630
Profile Includes Aluminum; Calcium; Cadmium; Chromium; Copper; Iron; Magnesium; Manganese; Lead; Zinc; Total 24-hour Volume

Patient Preparation
Post chelation 24-hour collection begins at same time as the chelation therapy IV is begun. Patient must empty bladder immediately prior to IV. Urine must be collected for a full 24-hour period – including during the IV therapy; if necessary. 24-hour collection period begins immediately after patient has urinated (but not collected) to empty his/her bladder. Patient should note date & time in order to collect urine for a full 24-hour period. Special Instructions Results are based upon a full 24-hour collection. The patient must collect all urine during the 24-hour period. If, for some reason, the patient is unable to collect urine for a full 24 hours, please note the length of time of collection on the requisition or the approximate amount of urine sample lost due to non-collection.

Specimen Volume
Measure the urine to obtain the 24-hour volume. Note total volume of 24-hour specimen and date & time of completion on requisition. Mix the 24-hour urine well by shaking the gallon jug before pouring an aliquot of 150 mL into the transport container.

Preferred Volume 25 mL aliquot
Minimum Volume 11 mL aliquot
Collection Container One-gallon mineral-free amber plastic jug. For convenience, a mineral-free cup may be used to catch urine and then be poured into the gallon jug. Do not rinse the collection cup between collections (trace minerals may be in the rinse water). Instead, seal cup with mineral-free plastic lid in-between use during collection. The patient must collect all urine during the 24-hour period. If, for some reason, the patient is unable to collect urine for a full 24 hours, please note the length of time of collection on the requisition or the approximate amount of urine sample lost due to non-collection.

Storage & Transport Instructions
Refrigerate within 10 minutes of completion. Refrigerate specimen during the 24-hour collection period. The patient must collect all urine during the 24-hour period. If, for some reason, the patient is unable to collect urine for a full 24 hours, please note the length of time of collection on the requisition or the approximate amount of urine sample lost due to non-collection.

Transport Container Acid-washed mineral-free plastic 1 gallon jug transport bottle.
Storage & Transport Instructions Refrigerate specimen during the 24-hour collection process. Refrigerate of freeze aliquot t or transport.

Causes for Rejection
Total 24-hour urine volume not noted on requisition; non-mineral-free containers used for collection & transport.

Trace Elements - Urine, Pre & Post Chelation UMEP
CPT 82108, 82310, 82300, 82495, 82525, 83540, 83735, 83785, 83655, 84630
For Pre collection: 24-hour collection period begins immediately after patient has urinated (but not collected) to empty his/her bladder. Patient should note date & time in order to collect urine for a full 24-hour period. Urine must be collected for a full 24-hour period prior to having the chelating agent administered to the patient. Pre & Post Aliquots must be properly labeled when submitted. Both specimens must be submitted together.

TSH
CPT 84443
Synonyms Thyroid-Stimulating Hormone
Patient Preparation None
Special Instructions None
Specimen Volume 1 mL serum
Minimum Volume 0.5 mL
Collection Container SST or red-stopper tube
Transport Container Plastic transport tube

Storage & Transport Instructions Refrigerate or freeze specimen. Billing option will apply on approved accounts. Note: If no payment option is selected, physician account will be billed; New clients are required to submit payment with first specimen. Billing option will apply on approved accounts.

UA + C
CPT 81002, if without urine sediment microscopy (81000, if with urine sediment microscopy); 81009
Synonyms UA + C
Profile Includes Color, appearance, & specific gravity are recorded. Dipstick testing includes: leukocyte esterase; nitrite; pH; protein; glucose; ketones; urbilinogen; bilirubin; blood (direct RBC); hemoglobin (lysed RBC); urine Vitamin C. Confirmatory tests are run if protein, ketones, or bilirubin are abnormal on dipstick test. Any abnormal color, appearance, or readings (except pH) on dipstick will be followed up with a microscopic analysis of the urine sediment.

Patient Preparation
None
Special Instructions First morning urine is preferred, but not required. Wash hands prior to collection. For a midstream-catch specimen, patient should urinate a small amount of urine into the toilet, then collect urine in the collection container without stopping the urine stream. Female patients: If specimen may be contaminated with vaginal discharge or menstrual blood, the vaginal area should be thoroughly cleansed by wiping from front to back with moistened towelettes prior to collecting a urine specimen. Note on requisition if patient is currently menstruating.

Specimen Volume 20 mL urine; midstream-catch; light protected
Minimum Volume 15 mL
Collection Container Clean container
Transport Container Plastic transport tube; light protected
Storage & Transport Instructions Refrigerate within 10 minutes of collection. Keep refrigerated. DO NOT FROZEN!

Causes for Rejection
Contaminated specimen; frozen specimen; unrefrigerated specimen; insufficient volume; specimen not protected from light. Specimen must be received by noon on Monday - Friday following the day of collection.

Payment
Bill Physician/Clinic/Referral Lab at address above. Payment is due within 30 days of invoice. I ordered this test online at www.biocenterlab.org. You already have my payment information.

Payment enclosed. A receipt will be issued to you for insurance submittal. Please complete Patient Information (and credit card Information, if applicable). If patient is responsible for payment, it must be submitted with specimen.

Amount of personal check $_________ Amount of money order $_________ Amount of credit card purchase $_________
Medicare will only pay for services that it determines to be “reasonable and necessary” under section 1862(a)(1) of the Medicare law. If Medicare determines that a particular service, although it would otherwise be covered, is “not reasonable and necessary” under Medicare program standards, Medicare will deny payment for that service. Medicare does not cover some of the tests performed here, since some are considered “preventive”. Medicare pays only for tests it considers “medically necessary”. Medicare does not pay for routine testing or screening. I believe in your case, Medicare is likely to respond to the service(s) indicated below:

Medicare usually covers the following laboratory tests except if Medicare determines them not to be medically necessary. Medicare will not pay for vitamin, mineral and nutrient testing on follow-up visits.

**Selenium, Serum**
- CPT 84255
- Synonyms: Serum Se
- Patient Preparation: None
- Special Instructions: None
- Specimen Volume: 1.5 mL serum
- Minimum Volume: 0.5 mL
- Collection Container: Trace element non-additive tube
- Transport Container: Metal-free plastic transport tube
- Storage & Transport Instructions: Refrigerate or freeze

**Strontium, Urine**
- CPT 82193
- Synonyms: Urine Sr
- Patient Preparation: None
- Special Instructions: None
- Specimen Volume: 20 mL urine
- Minimum Volume: 10 mL
- Collection Container: Clean container
- Transport Container: Plastic transport tube
- Storage & Transport Instructions: Refrigerate or freeze

**T3, Free (Unbound)**
- CPT 84481
- Synonyms: Free Tri-iodothyronine; f-T3
- Patient Preparation: None
- Special Instructions: None
- Specimen Volume: 1 mL serum
- Minimum Volume: 0.5 mL
- Collection Container: SST or red-stopper tube
- Transport Container: Plastic transport tube
- Storage & Transport Instructions: Refrigerate or freeze
- Causes for Rejection: Gross hemolysis

**T4, Free (Direct)**
- CPT 84439
- Synonyms: Free T4, Direct, Serum; Unbound T4
- Patient Preparation: None
- Special Instructions: None
- Specimen Volume: 1 mL serum
- Minimum Volume: 0.5 mL
- Collection Container: SST or red-stopper tube
- Transport Container: Plastic transport tube
- Storage & Transport Instructions: Refrigerate or freeze
- Causes for Rejection: Gross hemolysis

**Testosterone**
- CPT 84493-90
- Patient Preparation: None
- Special Instructions: None
- Specimen Volume: 1 mL serum
- Minimum Volume: 0.3 mL
- Collection Container: SST or red-stopper tube
- Transport Container: Plastic transport tube
- Storage & Transport Instructions: Refrigerate or freeze
- Causes for Rejection: Gross hemolysis

**Thyroid Antibodies**
- CPT 86800; 86876
- Panel Includes: Thyroid Antithyroglobulin Antibody, Thyroid Peroxidase (TPO) Antibodies
- Patient Preparation: None
- Special Instructions: None
- Specimen Volume: 2 mL serum
- Minimum Volume: 1 mL
- Collection Container: SST or red-stopper tube
- Transport Container: Plastic transport tube
- Storage & Transport Instructions: Freeze
- Causes for Rejection: Gross hemolysis, gross lipemia

**Thyroid Panel**
- CPT 84481; 84439; 84443
- Panel Includes: Free T3, Free T4, TSH
- Patient Preparation: None
- Special Instructions: None
- Specimen Volume: 1 mL serum
- Minimum Volume: 0.5 mL
- Collection Container: SST or red-stopper tube
- Transport Container: Plastic transport tube
- Storage & Transport Instructions: Refrigerate or freeze
- Causes for Rejection: Gross hemolysis, gross lipemia

**Panel**
- CPT 86800; 86876
- Panel Includes: Thyroid Antithyroglobulin Antibody, Thyroid Peroxidase (TPO) Antibodies
- Patient Preparation: None
- Special Instructions: None
- Specimen Volume: 2 mL serum
- Minimum Volume: 1 mL
- Collection Container: SST or red-stopper tube
- Transport Container: Plastic transport tube
- Storage & Transport Instructions: Freeze
- Causes for Rejection: Gross hemolysis, gross lipemia

I request that payment of authorized Medicare benefits be made on my behalf to the Bio-Center Laboratory for any services furnished me by the laboratory. I authorize any holder of medical information about me to release to The Centers for Medicare & Medicaid Services (CMS) and its agents any information needed to determine these benefits or the benefits payable for related services.

Patient Name: 
Date: 

**Note:** Your health information will be kept confidential. Any information that we collect about you or your health information on this form may be shared with Medicare. Your health information, which Medicare sees will be kept confidential by Medicare.
**PSA, Free**

<table>
<thead>
<tr>
<th>CPT</th>
<th>84154</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms</td>
<td>Free Prostate-Specific Antigen</td>
</tr>
<tr>
<td>Patient Preparation</td>
<td>None</td>
</tr>
<tr>
<td>Special Instructions</td>
<td>None</td>
</tr>
<tr>
<td>Specimen Volume</td>
<td>1 mL serum</td>
</tr>
<tr>
<td>Minimum Volume</td>
<td>0.5 mL</td>
</tr>
<tr>
<td>Collection Container</td>
<td>SST or red-stopper tube</td>
</tr>
<tr>
<td>Transport Container</td>
<td>Plastic transport tube</td>
</tr>
<tr>
<td>Storage &amp; Transport Instructions</td>
<td>Freeze</td>
</tr>
<tr>
<td>Causes for Rejection</td>
<td>Gross hemolysis</td>
</tr>
</tbody>
</table>

**Special Instructions**

1. Continue taking vitamin B6 and Zinc one week prior to collecting specimen.
2. If collected under treatment for pyrroluria, continue taking vitamin B6 and Zinc one week prior to collecting specimen. (2) If collected under treatment for pyrroluria, continue taking vitamin B6 and Zinc one week prior to collecting specimen.

**Storage & Transport Instructions**

- Minimum Volume: 2 mL
- Specimen Volume: 1 mL
- SST or red-stopper tube
- Freezer

**Note:** Label specimens carefully with each condition

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**Pyroles, Urine**

<table>
<thead>
<tr>
<th>CPT</th>
<th>84999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonyms</td>
<td>Mauve Factor; Kryptopyrroles</td>
</tr>
<tr>
<td>Patient Preparation</td>
<td>(1) If first time testing for pyrroles, discontinue taking any B6 or Zinc one week prior to collecting specimen. (2) If under treatment for pyrroluria, continue taking vitamin B6 and Zinc</td>
</tr>
<tr>
<td>Special Instructions</td>
<td>None</td>
</tr>
<tr>
<td>Specimen Volume</td>
<td>1 mL serum</td>
</tr>
<tr>
<td>Minimum Volume</td>
<td>0.5 mL</td>
</tr>
<tr>
<td>Collection Container</td>
<td>SST or red-stopper tube</td>
</tr>
<tr>
<td>Transport Container</td>
<td>Plastic transport tube</td>
</tr>
<tr>
<td>Storage &amp; Transport Instructions</td>
<td>Freeze</td>
</tr>
<tr>
<td>Causes for Rejection</td>
<td>Gross hemolysis</td>
</tr>
</tbody>
</table>

**Patient Preparation**

- Mon - Thurs 8am - 5pm
- Fri 9am - 3pm
- 3100 N. Hillside | Wichita, KS 67219
- 316.682.3100 | 800.447.7276

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**Amino Acid, Essential**

<table>
<thead>
<tr>
<th>CPT</th>
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</tr>
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<tbody>
<tr>
<td>Profile Includes</td>
<td>Histidine; isoleucine; leucine; lysine; methionine; phenylalanine; threonine; tryptophan; valine; arginine</td>
</tr>
<tr>
<td>Patient Preparation</td>
<td>Fasting</td>
</tr>
<tr>
<td>Special Instructions</td>
<td>None</td>
</tr>
<tr>
<td>Specimen Volume</td>
<td>1.5 mL EDTA plasma</td>
</tr>
<tr>
<td>Minimum Volume</td>
<td>0.5 mL</td>
</tr>
<tr>
<td>Collection Container</td>
<td>EDTA tube</td>
</tr>
<tr>
<td>Transport Container</td>
<td>Plastic transport tube</td>
</tr>
<tr>
<td>Storage &amp; Transport Instructions</td>
<td>Refrigerate or freeze</td>
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<td>Causes for Rejection</td>
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**Amino Acid, Fractionated**

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<tr>
<td>Profile Includes</td>
<td>Aspartic acid; glutamic acid; hydroxyproline; serine; asparagine; glycine; glutamine; taurine; histidine; citrulline; threonine; alanine; arginine; proline; a-amino-N-butyric acid; tyrosine; valine; methionine; cystine; isoleucine; leucine; phenylalanine; tryptophane; ornithine; lysine</td>
</tr>
<tr>
<td>Patient Preparation</td>
<td>Fasting</td>
</tr>
<tr>
<td>Special Instructions</td>
<td>None</td>
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<tr>
<td>Specimen Volume</td>
<td>1.5 mL EDTA plasma</td>
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<tr>
<td>Minimum Volume</td>
<td>0.5 mL</td>
</tr>
<tr>
<td>Collection Container</td>
<td>EDTA tube</td>
</tr>
<tr>
<td>Transport Container</td>
<td>Plastic transport tube</td>
</tr>
<tr>
<td>Storage &amp; Transport Instructions</td>
<td>Refrigerate or freeze</td>
</tr>
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<td>Causes for Rejection</td>
<td>Gross hemolysis</td>
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**Beta Carotene**

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<tr>
<td>Special Instructions</td>
<td>None</td>
</tr>
<tr>
<td>Specimen Volume</td>
<td>1 mL serum; light protected</td>
</tr>
<tr>
<td>Minimum Volume</td>
<td>0.2 mL</td>
</tr>
<tr>
<td>Collection Container</td>
<td>SST or red-stopper tube</td>
</tr>
<tr>
<td>Transport Container</td>
<td>Amber plastic transport tube</td>
</tr>
<tr>
<td>Storage &amp; Transport Instructions</td>
<td>Refrigerate or freeze</td>
</tr>
<tr>
<td>Causes for Rejection</td>
<td>Gross hemolysis</td>
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</table>

**Candida Antibodies IgG, IgA, IgM**

<table>
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<tbody>
<tr>
<td>Patient Preparation</td>
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<tr>
<td>Special Instructions</td>
<td>None</td>
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<td>Specimen Volume</td>
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<tr>
<td>Minimum Volume</td>
<td>0.2 mL</td>
</tr>
<tr>
<td>Collection Container</td>
<td>SST or red-stopper tube</td>
</tr>
<tr>
<td>Transport Container</td>
<td>Plastic transport tube</td>
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<tr>
<td>Storage &amp; Transport Instructions</td>
<td>Refrigerate or freeze</td>
</tr>
<tr>
<td>Causes for Rejection</td>
<td>Gross hemolysis</td>
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</table>

**Calcium, RBC**

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<tr>
<td>Synonyms</td>
<td>RBC Ca</td>
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<tr>
<td>Patient Preparation</td>
<td>None</td>
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<td>Special Instructions</td>
<td>None</td>
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<tr>
<td>Specimen Volume</td>
<td>6 mL heparin whole blood</td>
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<tr>
<td>Minimum Volume</td>
<td>1 mL</td>
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<tr>
<td>Collection Container</td>
<td>Heparin tube</td>
</tr>
<tr>
<td>Transport Container</td>
<td>Collection container</td>
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<tr>
<td>Storage &amp; Transport Instructions</td>
<td>Refrigerate. DO NOT FREEZE!</td>
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<tr>
<td>Causes for Rejection</td>
<td>Frozen specimen</td>
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**CEA**

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<td>Synonyms</td>
<td>Carcinoembryonic Antigen</td>
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<td>Patient Preparation</td>
<td>None</td>
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<td>Special Instructions</td>
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<tr>
<td>Specimen Volume</td>
<td>0.5 mL serum</td>
</tr>
<tr>
<td>Minimum Volume</td>
<td>0.2 mL</td>
</tr>
<tr>
<td>Collection Container</td>
<td>SST or red-stopper tube</td>
</tr>
<tr>
<td>Transport Container</td>
<td>Plastic transport tube</td>
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<tr>
<td>Storage &amp; Transport Instructions</td>
<td>Refrigerate or freeze</td>
</tr>
<tr>
<td>Causes for Rejection</td>
<td>Gross hemolysis</td>
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**Cholesterol, Total**

<table>
<thead>
<tr>
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<tr>
<td>Patient Preparation</td>
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<tr>
<td>Special Instructions</td>
<td>None</td>
</tr>
<tr>
<td>Specimen Volume</td>
<td>1 mL serum</td>
</tr>
<tr>
<td>Minimum Volume</td>
<td>0.5 mL</td>
</tr>
<tr>
<td>Collection Container</td>
<td>SST or red-stopper tube</td>
</tr>
<tr>
<td>Transport Container</td>
<td>Plastic transport tube</td>
</tr>
<tr>
<td>Storage &amp; Transport Instructions</td>
<td>Refrigerate or freeze</td>
</tr>
<tr>
<td>Causes for Rejection</td>
<td>Gross hemolysis</td>
</tr>
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**Pyroles, Urine**

<table>
<thead>
<tr>
<th>CPT</th>
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</thead>
<tbody>
<tr>
<td>See Pyroles, Urine</td>
<td>Special Instructions 3 collections</td>
</tr>
<tr>
<td>A more comprehensive evaluation of pyrrole excretion may be done by collecting 3 specimens:</td>
<td></td>
</tr>
<tr>
<td>Specimen #1: Collected in a calm mental state</td>
<td></td>
</tr>
<tr>
<td>Specimen #2: Collected in an anxious mental state</td>
<td></td>
</tr>
<tr>
<td>Specimen #3: Collected in an extreme anxious mental state</td>
<td></td>
</tr>
<tr>
<td>Note: Label specimens carefully with each condition</td>
<td></td>
</tr>
</tbody>
</table>
Causes for Rejection
Storage & Transport Instructions
Transport Container
Collection Container
Minimum Volume same
Specimen Volume
accepted Monday – Thursday only.
capacity to insure correct blood to anticoagulant ratio of specimen.

Complete Blood Count with Differential (CBC)
CPT 85007, 85007
Synonyms CBC with Differential
Profile Includes: Automated count (white blood cells; red blood cells; hemoglobin; hematocrit; MCV; MCH; MCHC; platelets); Manual Differential
Patient Preparation None
Special Instructions Collection tube must be filled to full draw capacity to insure correct blood to anticoagulant ratio of specimen. Specimen must be shipped same day as collection. Specimens accepted Monday – Thursday only.
Specimen Volume 6 mL EDTA whole blood
Transport Container Plastic transport tube.
Collection Container EDTA tube
Minimum Volume same
Storage & Transport Instructions Refrigerate. DO NOT FREEZE!
Causes for Rejection Gross hemolysis

C-Reactive Protein (CRP) – Ultra Sensitive
CPT 86141
Synonyms Cardiac-Reactive Protein
Patient Preparation None
Special Instructions None
Specimen Volume 1 mL serum
Minimum Volume 0.5 mL
Collection Container SST or red-stopper tube
Transport Container Plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection Gross hemolysis

Creatinine
CPT 82565
Synonyms Serum Cr
Patient Preparation None
Special Instructions None
Specimen Volume 1 mL serum
Minimum Volume 0.5 mL
Collection Container SST or red-stopper tube
Transport Container Plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection Gross hemolysis

Copper, RBC
CPT 82525
Synonyms RBC Cu
Patient Preparation None
Special Instructions None
Specimen Volume 6 mL Heparin whole blood
Minimum Volume 1 mL
Collection Container Heparin tube
Transport Container Collection container
Storage & Transport Instructions Refrigerate. DO NOT FREEZE!
Causes for Rejection Frozen specimen

Lycopene
CPT 82491
Patient Preparation None
Special Instructions None
Specimen Volume 1 mL serum; light protected
Minimum Volume 0.2 mL
Collection Container SST or red-stopper tube
Transport Container Amber plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection Gross hemolysis

Magnesium, RBC
CPT 83735
Synonyms RBC Mg
Patient Preparation None
Special Instructions None
Specimen Volume 6 mL Heparin whole blood
Minimum Volume 1 mL
Collection Container Heparin tube
Transport Container Collection container
Storage & Transport Instructions Refrigerate. DO NOT FREEZE!
Causes for Rejection Frozen specimen

Magnesium, Serum
CPT 83735
Synonyms Serum Mg
Patient Preparation None
Special Instructions None
Specimen Volume 1.5 mL serum
Minimum Volume 0.5 mL
Collection Container Trace element non-additive tube
Transport Container Metal-free plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection Gross hemolysis

Manganese, RBC
CPT 83785
Synonyms Serum Mn
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 1 mL
Collection Container Trace element non-additive tube
Transport Container Metal-free plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection Gross hemolysis

Manganese, Serum
CPT 83785
Synonyms Serum Mn
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 1 mL
Collection Container Trace element non-additive tube
Transport Container Metal-free plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection Gross hemolysis

Parasitology, Stool Exam (single specimen)
CPT 87177, 87272 (x2)
Profile Includes: Stool exam (single specimen); Cryptosporidium Ag; Giardia Ag
Patient Preparation: No bismuth, barium, laxatives, antibiotics and antacid
Specimen Volume: Using the collection spoon built into the lid of the Ecolite vial, add enough stool to bring combination of fluid and stool sample to red specimen line on vial. Filling vial to slightly above the red line is allowed. Close cap tightly and shake vigorously.
Minimum Volume Same
Collection Container: Use clean dry container. Do not allow urine or water to come in contact with specimen.
Transport Container: Para-Pak Ultra Ecolite plastic transport vial
Storage & Transport Instructions: Room temperature
Causes for Rejection: Frozen Specimen

Parasitology, Stool Exam (three specimens)
CPT 87177 (x3); 87272 (x6)
See instructions for Stool Exam (single specimen). Collect three separate stool specimens, placing each in its own plastic transport tube, with time & date noted on the vial. Collection days should be spread out to approximately every other day.

Progesterone
CPT 84144
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 1 mL
Collection Container SST or red-stopper tube
Transport Container Plastic transport tube
Storage & Transport Instructions: Freeze
Causes for Rejection: Gross hemolysis

Sodium, Serum
CPT 84590
Synonyms Serum Na
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 1 mL
Collection Container Trace element non-additive tube
Transport Container Metal-free plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection: Gross hemolysis

Sulfur, Serum
CPT 87040
Synonyms Serum S
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 1 mL
Collection Container Trace element non-additive tube
Transport Container Metal-free plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection: Gross hemolysis

Total Protein, Serum
CPT 81815
Synonyms Serum TP
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 1 mL
Collection Container Trace element non-additive tube
Transport Container Metal-free plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection: Gross hemolysis

Total Calcium, Serum
CPT 86800
Synonyms Serum Ca
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 1 mL
Collection Container Trace element non-additive tube
Transport Container Metal-free plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection: Gross hemolysis

Total Chloride, Serum
CPT 84300
Synonyms Serum Cl
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 1 mL
Collection Container Trace element non-additive tube
Transport Container Metal-free plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection: Gross hemolysis

Total Copper, Serum
CPT 84600
Synonyms Serum Cu
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 0.5 mL
Collection Container SST or red-stopper tube
Transport Container Metal-free plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection Gross hemolysis

Total Magnesium, Serum
CPT 84165
Synonyms Serum Mg
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 1 mL
Collection Container Heparin tube
Transport Container Collection container
Storage & Transport Instructions Refrigerate. DO NOT FREEZE!
Causes for Rejection Frozen specimen

Total Phosphate, Serum
CPT 86890
Synonyms Serum P
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 1 mL
Collection Container Trace element non-additive tube
Transport Container Metal-free plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection: Gross hemolysis

Total Protein, Serum
CPT 81815
Synonyms Serum TP
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 1 mL
Collection Container Trace element non-additive tube
Transport Container Metal-free plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection: Gross hemolysis

Total Calcium, Serum
CPT 86800
Synonyms Serum Ca
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 1 mL
Collection Container Trace element non-additive tube
Transport Container Metal-free plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection: Gross hemolysis

Total Chloride, Serum
CPT 84300
Synonyms Serum Cl
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 1 mL
Collection Container Trace element non-additive tube
Transport Container Metal-free plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection: Gross hemolysis

Total Copper, Serum
CPT 84600
Synonyms Serum Cu
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 0.5 mL
Collection Container SST or red-stopper tube
Transport Container Metal-free plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection Gross hemolysis

Total Magnesium, Serum
CPT 84165
Synonyms Serum Mg
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 1 mL
Collection Container Heparin tube
Transport Container Collection container
Storage & Transport Instructions Refrigerate. DO NOT FREEZE!
Causes for Rejection Frozen specimen

Total Phosphate, Serum
CPT 86890
Synonyms Serum P
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 1 mL
Collection Container Trace element non-additive tube
Transport Container Metal-free plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection: Gross hemolysis

Total Protein, Serum
CPT 81815
Synonyms Serum TP
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 1 mL
Collection Container Trace element non-additive tube
Transport Container Metal-free plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection: Gross hemolysis

Total Calcium, Serum
CPT 86800
Synonyms Serum Ca
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 1 mL
Collection Container Trace element non-additive tube
Transport Container Metal-free plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection: Gross hemolysis

Total Chloride, Serum
CPT 84300
Synonyms Serum Cl
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 1 mL
Collection Container Trace element non-additive tube
Transport Container Metal-free plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection: Gross hemolysis

Total Copper, Serum
CPT 84600
Synonyms Serum Cu
Patient Preparation None
Special Instructions None
Specimen Volume 2 mL serum
Minimum Volume 0.5 mL
Collection Container SST or red-stopper tube
Transport Container Metal-free plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection Gross hemolysis
Indican, Urine
CPT 84999
Patient Preparation None
Special Instructions None
Specimen Volume 12 mL urine
Minimum Volume 5.0 mL
Collection Container Clean container
Transport Container Plastic transport tube
Storage & Transport Instructions Freeze
Causes for Rejection Less than 5.0 mL received

Lipid Profile
CPT 82025
Profile Includes Cholesterol; triglycerides; high-density lipoprotein (HDL); very low-density lipoprotein (VLDL); low-density lipoprotein (LDL) & risk classification for coronary heart disease (CHD); cholesterol to HDL ratio & risk classification for CHD; LDL to HDL ratio & risk classification for CHD
Patient Preparation Fasting
Special Instructions None
Specimen Volume 4 mL serum
Minimum Volume 1.5 mL
Collection Container SST or red-stopper tube
Transport Container Plastic transport tube
Storage & Transport Instructions Freeze
Causes for Rejection Gross hemolysis

Lutein
CPT 82049
Patient Preparation None
Special Instructions None
Specimen Volume 1 mL serum; light protected
Minimum Volume 0.2 mL
Collection Container SST or red-stopper tube
Transport Container Plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection Gross hemolysis

Cytotoxic Food Sensitivity, Basic
CPT 88649
Synonyms Basic Cyto
Profile Includes 24 specific food allergens
Patient Preparation 12-14 hour fast, (no food, supplements, medications or tobacco products). Bottled water is the only beverage allowed during the fast. Patient should not brush teeth the morning of the collection.
Special Instructions Monday through Wednesday collections only. Specimen must be shipped same day as collection.
Specimen Volume 10 mL ACD whole blood. Draw-tube must be filled to full draw capacity to insure correct blood to anticoagulant ratio of specimen.

Cytotoxic Food Sensitivity, Individual
CPT 88669
Synonyms Individual Cyto
Note A personalized profile may be created by requesting any combination of food allergens listed in the Standard List #1 and #2 (i.e. may be ordered individually from either list). See allergens lists at the end of this section.
Patient Preparation Fasting
Special Instructions None
Specimen Volume 4 mL serum
Minimum Volume 1.5 mL
Collection Container SST or red-stopper tube
Transport Container Plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection Gross hemolysis

Cytotoxic Food Sensitivity, Special Preparation
CPT 88689
Synonyms Special Prep Cyto
Note – any food allergen not listed in the Standard Lists #1 and #2. See allergens lists at the end of this section.
Requires a small sample of the allergen substance to be tested. This must arrive a minimum of two full working days (Monday – Friday) prior to arrival of the patient’s blood specimen. Contact BCL for approval of allergen substance that is to be tested against patient’s blood.
Patient Preparation 12-14 hour fast, (no food, supplements, medications or tobacco products). Bottled water is the only beverage allowed during the fast. Patient should not brush teeth the morning of the collection.
Special Instructions Monday through Wednesday blood collections only. Blood specimen must be shipped same day as collection.
Specimen Volume 5 mL ACD whole blood. Draw-tube must be filled to full draw capacity to insure correct blood to anticoagulant ratio of specimen.

Hemoglobin (Hgb) A1c
CPT 83036
Synonyms HbA1c
Patient Preparation None
Special Instructions Do not freeze
Specimen Volume 6 mL EDTA whole blood
Minimum Volume same
Collection Container EDTA tube.
Transport Container Collection container
Storage and Transport Instructions Store specimens at room temperature or refrigerate.
Causes for Rejection Clotted Specimen

Histamine
CPT 83088
Patient Preparation Discontinue antihistamines two days before collection of specimen
Special Instructions None
Specimen Volume Draw until blood stops flowing into tube provided by Bio Center Lab. These tubes will draw blood to just below the black mark on the label. Immediately transfer unclotted blood into 5 mL 10% trichloroacetic acid (TCA). Mix specimen well by vigorously shaking TCA tube after adding blood. Stable one month if kept frozen.
Minimum Volume same
Collection Container Non-additive tube; draw this tube last if other tubes are being collected from the patient; do not allow whole blood to clot
Transport Container Plastic transport tube with preservative.
Storage & Transport Instructions Freeze
Causes for Rejection Inadequate specimen added to TCA aliquot; specimen not frozen.

Homocysteine
CPT 82131
Patient Preparation None
Special Instructions Keep specimen cold and centrifuge within 6 hours.
Specimen Volume 1 mL serum
Minimum Volume 0.5 mL
Collection Container SST or red-stopper tube
Transport Container Plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection Gross hemolysis

Insulin
CPT 83025
Synonyms Free Prostaste-Specific Antigen
Patient Preparation Fasting
Special Instructions None
Specimen Volume 1 mL serum
Minimum Volume 0.5 mL
Collection Container SST or red-stopper tube
Transport Container Plastic transport tube
Storage & Transport Instructions Freeze
Causes for Rejection Gross hemolysis

Lipid Profile
CPT 82025
Profile Includes Cholesterol; triglycerides; high-density lipoprotein (HDL); very low-density lipoprotein (VLDL); low-density lipoprotein (LDL) & risk classification for coronary heart disease (CHD); cholesterol to HDL ratio & risk classification for CHD; LDL to HDL ratio & risk classification for CHD
Patient Preparation Fasting
Special Instructions None
Specimen Volume 4 mL serum
Minimum Volume 1.5 mL
Collection Container SST or red-stopper tube
Transport Container Plastic transport tube
Storage & Transport Instructions Freeze
Causes for Rejection Gross hemolysis

Lutein
CPT 82049
Patient Preparation None
Special Instructions None
Specimen Volume 1 mL serum; light protected
Minimum Volume 0.2 mL
Collection Container SST or red-stopper tube
Transport Container Amber plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection Gross hemolysis

Lipid Profile
CPT 82025
Profile Includes Cholesterol; triglycerides; high-density lipoprotein (HDL); very low-density lipoprotein (VLDL); low-density lipoprotein (LDL) & risk classification for coronary heart disease (CHD); cholesterol to HDL ratio & risk classification for CHD; LDL to HDL ratio & risk classification for CHD
Patient Preparation Fasting
Special Instructions None
Specimen Volume 4 mL serum
Minimum Volume 1.5 mL
Collection Container SST or red-stopper tube
Transport Container Plastic transport tube
Storage & Transport Instructions Freeze
Causes for Rejection Gross hemolysis

Lutein
CPT 82049
Patient Preparation None
Special Instructions None
Specimen Volume 1 mL serum; light protected
Minimum Volume 0.2 mL
Collection Container SST or red-stopper tube
Transport Container Amber plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection Gross hemolysis

Cytotoxic Food Sensitivity, Basic
CPT 88649
Synonyms Basic Cyto
Profile Includes 24 specific food allergens
Patient Preparation 12-14 hour fast, (no food, supplements, medications or tobacco products). Bottled water is the only beverage allowed during the fast. Patient should not brush teeth the morning of the collection.
Special Instructions Monday through Wednesday collections only. Specimen must be shipped same day as collection.
Specimen Volume 10 mL ACD whole blood. Draw-tube must be filled to full draw capacity to insure correct blood to anticoagulant ratio of specimen.

Cytotoxic Food Sensitivity, Individual
CPT 88669
Synonyms Individual Cyto
Note A personalized profile may be created by requesting any combination of food allergens listed in the Standard List #1 and #2 (i.e. may be ordered individually from either list). See allergens lists at the end of this section.
Patient Preparation Fasting
Special Instructions None
Specimen Volume 4 mL serum
Minimum Volume 1.5 mL
Collection Container SST or red-stopper tube
Transport Container Plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection Gross hemolysis

Cytotoxic Food Sensitivity, Special Preparation
CPT 88689
Synonyms Special Prep Cyto
Note – any food allergen not listed in the Standard Lists #1 and #2. See allergens lists at the end of this section.
Requires a small sample of the allergen substance to be tested. This must arrive a minimum of two full working days (Monday – Friday) prior to arrival of the patient’s blood specimen. Contact BCL for approval of allergen substance that is to be tested against patient’s blood.
Patient Preparation 12-14 hour fast, (no food, supplements, medications or tobacco products). Bottled water is the only beverage allowed during the fast. Patient should not brush teeth the morning of the collection.
Special Instructions Monday through Wednesday blood collections only. Blood specimen must be shipped same day as collection.
Specimen Volume 10 mL ACD whole blood. Draw-tube must be filled to full draw capacity to insure correct blood to anticoagulant ratio of specimen.

Cytotoxic Food Sensitivity, Special Preparation
CPT 88689
Synonyms Special Prep Cyto
Profile Includes 90 specific food allergens. See allergens lists at the end of this section.
Patient Preparation 12-14 hour fast, (no food, supplements, medications or tobacco products). Bottled water is the only beverage allowed during the fast. Patient should not brush teeth the morning of the collection.
Special Instructions Monday through Wednesday collections only. Specimen must be shipped same day as collection.
Specimen Volume 10 mL ACD whole blood. Draw-tube must be filled to full draw capacity to insure correct blood to anticoagulant ratio of specimen.

Cytotoxic Food Sensitivity, Standard Preparation
CPT 88699
Synonyms Standard Cyto
Profile Includes 90 specific food allergens. See allergens lists at the end of this section.
Patient Preparation 12-14 hour fast, (no food, supplements, medications or tobacco products). Bottled water is the only beverage allowed during the fast. Patient should not brush teeth the morning of the collection.
Special Instructions Monday through Wednesday collections only. Specimen must be shipped same day as collection.
Specimen Volume 10 mL ACD whole blood. Draw-tube must be filled to full draw capacity to insure correct blood to anticoagulant ratio of specimen.

Cytotoxic Food Sensitivity, Special Preparation
CPT 88689
Synonyms Special Prep Cyto
Note – any food allergen not listed in the Standard Lists #1 and #2. See allergens lists at the end of this section.
Requires a small sample of the allergen substance to be tested. This must arrive a minimum of two full working days (Monday – Friday) prior to arrival of the patient’s blood specimen. Contact BCL for approval of allergen substance that is to be tested against patient’s blood.
Patient Preparation 12-14 hour fast, (no food, supplements, medications or tobacco products). Bottled water is the only beverage allowed during the fast. Patient should not brush teeth the morning of the collection.
Special Instructions Monday through Wednesday blood collections only. Blood specimen must be shipped same day as collection.
Specimen Volume 10 mL ACD whole blood. Draw-tube must be filled to full draw capacity to insure correct blood to anticoagulant ratio of specimen.
Cytotoxic Food Sensitivity, Standard List #2

CPT 86849
Synonyms Cyto List #2
Profile Includes 90 specific food allergens. See allergens lists at the end of this section.
Patient Preparation 12-14 hour fast, (no food, supplements, medications or tobacco products). Bottled water is the only beverage allowed during the fast. Patient should not brush teeth the morning of the collection.
Special Instructions Monday through Wednesday collections only. Specimen must be shipped same day as collection.
Specimen Volume 10 mL ACD whole blood. Draw-tube must be filled to full draw capacity to insure correct blood to anticoagulant ratio of specimen.
Minimum Volume same
Collection Container Yellow stopper ACD Sol’n A tube.
Transport Container Collection container
Storage & Transport Instructions Refrigerate. DO NOT FREEZE!
Transport Container Amber plastic transport tube
Transport Container SST or red-stopper tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection Gross hemolysis; frozen specimen; specimen not received by noon within 24 hours of collection.

DHEA-S

CPT 82627
Synonyms Dehydroepiandrosterone Sulfate
Patient Preparation None
Special Instructions None
Specimen Volume 1 mL, serum
Minimum Volume 0.5 mL
Collection Container SST or red-stopper tube
Transport Container Plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Patient Preparation None
Special Instructions None
Specimen Volume 1 mL serum
Minimum Volume 0.3 mL
Collection Container SST or red-stopper tube
Transport Container Amber plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection Gross hemolysis

Folate (Folic Acid)

CPT 82746
Synonyms Folic Acid
Patient Preparation None
Special Instructions None
Specimen Volume 1 mL serum; light protected
Minimum Volume 0.2 mL
Collection Container SST or red-stopper tube
Transport Container Amber plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection Gross hemolysis

Glucose

CPT 82947
Patient Preparation Fasting recommended
Special Instructions Separate serum from cells within 45 minutes of draw.
Specimen Volume 1 mL serum
Minimum Volume 0.5 mL
Collection Container SST or red-stopper tube
Transport Container Plastic transport tube
Storage & Transport Instructions Refrigerate or freeze
Causes for Rejection Gross hemolysis

Glucose 6-Phosphate Dehydrogenase (G6PD)

CPT 82955
Synonyms Glucose 6-Phosphate Dehydrogenase
Patient Preparation None
Special Instructions Monday thru. Thursday collections only. Specimen must be shipped same day as collection.
Specimen Volume 6 mL EDTA whole blood
Minimum Volume same
Collection Container EDTA tube. Collection tube must be filled to full draw capacity to insure correct blood to anticoagulant ratio of specimen.
Transport Container Collection container
Storage & Transport Instructions Refrigerated specimens are stable for 48 hours. DO NOT FREEZE! Specimen must be received by no later than noon the next day following collection.
Causes for Rejection Gross hemolysis; clotted specimen; frozen specimen

Glutathione RBC

CPT 82789
Patient Preparation None
Special Instructions Monday through Thursday collections only. Specimen must be shipped same day as collection.
Specimen Volume 10 mL ACD-solution A, whole blood and 6 mL EDTA, whole blood
Minimum Volume same
Collection Containers One Yellow stopper ACD-soin A tube and one EDTA tube. Each collection tube must be filled to full draw capacity to insure correct blood to anticoagulant ratio of specimens.
Transport Container Collection containers
Storage & Transport Instructions Refrigerate. DO NOT FREEZE!
Tube needs to be wrapped properly to prevent breakage during transportation. Specimen must be received by noon within 24 hours of collection.
Causes for Rejection Gross hemolysis; clotted specimen; frozen specimen

Glycemic Profile

CPT 82947, 83036
Profile Includes Glucose; Hemoglobin A1c; Estimated Average Glucose.
Patient Preparation Fasting recommended
Special Instructions Separate serum from cells within 45 minutes of draw.
Specimen Volume 1 mL serum, 6 mL whole blood
Minimum Volume 0.5 mL Serum, 1 mL whole blood
Collection Container SST tube, EDTA tube
Transport Container Plastic transport tube for serum, Collection container for whole blood
Storage & Transport Instructions Refrigerate whole blood, freeze serum
Causes for Rejection Gross hemolysis; clotted whole blood specimen

Hair Tissue Analysis

CPT P2031 (Medicare), 82310, 82495, 82525, 83540, 84311, 83735, 83785, 83411, 84255, 84630, 82108, 82175, 82300, 83655, 83825
Profile Includes 11 Hair Nutrient Minerals III (Calcium; Copper (Cu); Iron (Fe); Potassium (K); Magnesium (Mg); Manganese (Mn); Sodium (Na); Selenium (Se); Zinc (Zn); log (Na x Zn / Cu) is calculated); 5 Hair Toxic Minerals III (Aluminum (Al); Arsenic (As); Cadmium (Cd); Lead (Pb); Mercury (Hg))
Patient Preparation None
Special Instructions Obtain hair samples from several locations on the lower portion of the back of the patient’s head (from the area that includes the nape of the neck and up to as high as the tops of the ears). Sample should include only hair cut from next to the scalp which is two inches or less in length (measured from the scalp end of the hair sample). If hair length is greater than two inches, trim hair sample to two inches from scalp end & dispose of excess length of hair. The use of “trimming shears” is recommended for use on patients with hair lengths of two inches or less. For those patients with longer hair lengths, cut several strands of hairs at the scalp by using standard trimming scissors & then trim hair sample to proper length, discarding the excess. Collection kit is available upon request.
Specimen Volume 1 gram of hair
Minimum Volume 0.5 grams
Collection Container Plastic Ziploc bag
Storage & Transport Instructions Room temperature
Causes for Rejection Inadequate volume; excess hair length not trimmed & discarded

Hemoccult-ICT (3 specimens)

CPT 82270 (x3)
Synonyms Fecal Occult Blood
Patient Preparation Do not collect samples three days before/ after or during your menstrual period, or while you have bleeding hemorrhoids or blood in your urine, open cut on hands, or have strained during bowel movement.
Special Instructions Collect samples from 3 bowel movements approximately every other day.
Collection card should be returned to BCL within 3 days of last specimen collection.
Specimen Volume samples of 3 different stools, placed onto collection card.
Minimum Volume same
Collection Container Do not open windows of collection card until ready to transfer fresh stool specimen to the card. Use clean disposable container to collect stool. Use clean wooden specimen sticks to transfer small amount of each stool specimen to the specimen card. Date & time of each specimen must be noted on the front of the card.
Transport Container Hemoccult II specimen card. Place card in sealed Ziploc bag for transport.
Storage & Transport Instructions Store card at room temperature. Protect slides from heat & volatile chemicals.