**Vitamin B12**

**CPT Code:** 82607  
**Order Code:** C260  
**ABN Requirement:** No  
**Synonyms:** Cobalamin; B12  
**Specimen:** Serum  
**Volume:** 0.5 mL  
**Minimum Volume:** 0.2 mL  
**Container:** Gel-barrier tube (SST, Tiger Top)

**Collection:**

1. Collect and label sample according to standard protocols.  
2. Gently invert tube 5 times immediately after draw. DO NOT SHAKE.  
3. Allow blood to clot 30 minutes.  
4. Centrifuge at 1300 rcf for 10 minutes.

**Patient Preparation:** Patient should fast 10-12 hours prior to testing.

**Special Instructions:** Samples should not be taken from patients receiving therapy with high biotin doses (>5 mg/day) until at least 8 hours following the last dose. Protect sample from light.

**Transport:** Store serum at 2°C to 8°C after collection and ship the same day per packaging instructions provided with the Cleveland HeartLab, Inc. shipping box.

**Stability:**

- **Ambient (15-25°C):** not acceptable  
- **Refrigerated (2-8°C):** 7 days  
- **Frozen (-20°C):** 2 months  
- **Deep Frozen (-70°C):** 2 months

**Causes for rejections:** Samples which are heat-inactivated; specimens other than serum; improper labeling; samples not stored properly; samples older than stability limits

**Methodology:** Electrochemiluminescence Immunoassay (ECLIA)
**Turn Around Time:** 1 to 3 days

**Reference Range:**

<table>
<thead>
<tr>
<th>Age</th>
<th>pg/mL</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Ages</td>
<td>221-700</td>
</tr>
</tbody>
</table>

**Intended Use:** A Vitamin B-12 test is used to identify the cause of certain anemias, particularly macrocytic anemias, to evaluate the general health and nutritional status of a patient with signs of significant malnutrition or malabsorption, and to help identify the cause of mental or behavioral changes, especially in the elderly.

**Limitations:** In rare cases, interference due to extremely high titers of antibodies to analyte-specific antibodies, streptavidin or ruthenium can occur. Increased B12 may be seen in conditions such as leukemia or liver dysfunction.