Lab Dept: Chemistry

Test Name: IGG (IMMUNOGLOBIN G)

General Information
Lab Order Codes: IGG
Synonyms: Immunoglobulin G
CPT Codes: 82784 – Gammaglobulin; IgG, each
Test Includes: IgG concentration reported in mg/dL.

Logistics
Test Indications: Immunoglobulins, also known as humoral antibodies, recognize antigens and initiate mechanisms that destroy antigens. The major immunoglobulin produced by plasma cells is IgG, which makes up 70-75% of the total immunoglobulins. The major function of IgG appears to be neutralization of toxins (bacterial or viral) in tissue spaces.
Lab Testing Sections: Chemistry
Phone Numbers: MIN Lab: 612-813-6280
STP Lab: 651-220-6550
Test Availability: Daily, 24 hours
Turnaround Time: 1 day
Special Instructions: N/A

Specimen
Specimen Type: Blood
Container: Green top (Li Heparin) tube, preferred
Alternate: Red, marble or gold top tube
Draw Volume: 0.6 mL blood
Processed Volume: 0.2 mL serum/plasma
Collection: Routine venipuncture
Special Processing: Lab Staff: Centrifuge specimen, remove aliquot into a plastic sample cup. Specimens can be stored at refrigerated temperatures for 7 days. Centrifuge turbid or particulate samples prior to analysis.

Patient Preparation: None

Sample Rejection: Mislabeled or unlabeled specimen, turbid samples that do not clear after centrifugation

<table>
<thead>
<tr>
<th>Interpretive</th>
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<tbody>
<tr>
<td>Reference Range:</td>
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<table>
<thead>
<tr>
<th>Age:</th>
<th>Range (mg/dL):</th>
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<tbody>
<tr>
<td>0 - &lt;1 year:</td>
<td>320 - 1407 mg/dL</td>
</tr>
<tr>
<td>15 days - &lt;1 year:</td>
<td>108 - 702 mg/dL</td>
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<tr>
<td>1 - &lt;4 years:</td>
<td>316 - 1148 mg/dL</td>
</tr>
<tr>
<td>4 - &lt;10 years::</td>
<td>542 - 1358 mg/dL</td>
</tr>
<tr>
<td>10 - &lt;19 years:</td>
<td>658 - 1534 mg/dL</td>
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<tr>
<td>Adult Male:</td>
<td>540 - 1822 mg/dL</td>
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<tr>
<td>Adult Female:</td>
<td>552 - 1631 mg/dL</td>
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Critical Values: N/A

Limitations: Results from samples containing paraproteins (abnormal monoclonal antibodies) may incorrectly fall within the reference range. Samples with elevated total protein concentrations or samples from patients with suspected paraproteinemia can be screened using other laboratory methods such as protein electrophoresis. In addition, analysis of one or more diluted samples should be performed to ensure that consistent results are obtained. Specimens collected in EDTA collection tubes are not acceptable for use. Results should be evaluated by comparing to other clinically relevant information.

Tubidity and particles in samples can interfere with the assay. Therefore, particulate matter should be removed by centrifugation prior to running the assay.

Methodology: Immunoturbimetric

Bio-Rad Liquichek Immunology Control Package Insert, Bio-Rad Laboratories, Irvine, CA, USA

CALIPER Reference Range Studies. Accessed October 27, 2020

Abbott Alinity c Specific Protein Calibrator Package Insert, Abbott Diagnostics Division, Abbott Park, IL, 60064, USA, February 2018

Abbott Alinity c IgG Reagent Kit Instructions for Use, Abbott Diagnostics Division, Abbott Park, IL, 60064, USA. Revised June 2019

Updates:

2/8/2016: Update alt tube types