
Lab Dep: Chemistry

Test Name: VITAMIN D, 25-HYDROXY

General Information

Lab Order Codes: VDT

Synonyms: Vitamin D Assay; 25-Hydroxycholecalciferol; 25-OH-Vitamin D; 25-Hydroxy D2, 25-Hydroxy D3; Calcidiol

CPT Codes: 82306 – Calcifediol (25-OH Vitamin D-3)

Test Includes: Total 25-hydroxyvitamin measured in ng/mL.

Logistics

Test Indications: The test is used to assess patient's vitamin D status, evaluate hypo and hypercalcemia and to investigate the causes of osteomalacia and rickets. Also useful in monitoring vitamin D replacement therapy.

Lab Testing Sections: Chemistry (Performed on the Minneapolis Campus)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: Performed daily

Special Instructions: See [Patient Preparation](#)

Specimen

Specimen Type: Blood

Container: Preferred: SST (Gold, marble or red)
Alternate: Green (LiHep or NaHep), Lavender (EDTA) tubes

Draw Volume: 1.2 mL (Minimum: 0.5 mL) blood

Processed Volume: 0.5 mL (Minimum: 0.15 mL) serum/plasma

Collection: Routine venipuncture, capillary specimens are not recommended

Special Processing: Lab Staff: Centrifuge specimen, remove serum/plasma aliquot into a screw-capped plastic vial. Store at refrigerated temperatures for up to 12 days or at room temperature ≤72 hours.

Patient Preparation: Fasting samples are recommended, but not required

Sample Rejection: [Specimens other than those listed above](#); unlabeled or mislabeled specimens; grossly hemolysis; triglycerides >500 ug/dL that cannot be cleared by ultracentrifugation

Interpretive

Reference Range:

All ages: 30 – 100 ng/mL (Sufficiency)
Deficient: <10 ng/mL
Insufficiency: 10 – 30 ng/mL
Toxicity: >100 ng/mL

Critical Values: N/A

Limitations:

- Gross hemolysis falsely elevates Vitamin D.
- In patients receiving vitamin D2 supplementation, results that are subtherapeutic should be confirmed using another method, such as LC/MS, before being used for patient management.

Methodology: Chemiluminescent microparticle immunoassay

References: Abbott Architect Vitamin D, 25 Hydroxy Package Insert, (August 2016) Abbott Laboratories Diagnostics Division, Abbott Park IL, 60064, USA

Abbott Architect Calibrator Insert Sheet (September 2016) Abbott Laboratories Diagnostics Division, Abbott Park, IL, 60064, USA

Abbott Architect Safety Data Sheet (July 30, 2015) Abbott Laboratories Diagnostics Division, Abbott Park, IL, 60064

Abbott Alinity i 25-OH Vitamin D Reagent Kit Instructions for Use (February 2018) Abbott Laboratories Diagnostics Division, Abbott Park, IL, 60064, USA

Abbott Alinity i 25-OH Vitamin D Calibrator Kit Package Insert (February 2018) Abbott Park, IL, 60064, USA

Bio-Rad Liquichek Specialty Immunoassay Control Product Insert (September 2017) Bio-Rad Laboratories, Irvine, CA, 92618

Updates:

4/24/2018: Method and collection container updates

12/11/2020: Updated for method Abbott Alinity