
Lab Dept: Chemistry

Test Name: VALPROIC ACID LEVEL

General Information

Lab Order Codes: VALP

Synonyms: Depakene; Depakane, Depakote; Dipropylacetic acid; VPA; Divalproex; Valproate

CPT Codes: 80164 – Dipropylacetic acid (valproic acid)

Test Includes: Valproic acid concentration reported in ug/mL.

Logistics

Test Indications: Valproic acid is used for treatment of seizures. Valproic acid may be used in conjunction with other anti-epileptics against tonic-clonic and partial seizures. Peak levels are reached in 1-4 hours. The biologic half-life is about 15 hours.

Lab Testing Sections: Chemistry

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 2 hours

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: Green top (Li Heparin) tube, **preferred**
Alternate tube: Red, marble or gold top tube

Draw Volume: 0.6 mL blood

Processed Volume: 0.2 mL plasma/serum

Collection: Routine blood collection. Mix tubes containing anticoagulant by gentle inversion.

Special Processing:	Lab Staff: Centrifuge specimen, remove serum/plasma aliquot into a plastic sample cup. Store at refrigerated temperatures.
Patient Preparation:	None
Sample Rejection:	Mislabeled or unlabeled specimen; specimens other than heparinized plasma or serum

Interpretive

Reference Range: Therapeutic concentration: 50-100 ug/mL

Critical Values: Toxic concentration: >200 ug/mL

Limitations: N/A

Methodology: Particle Enhanced Turbidimetric Inhibition Immunoassay (PETINIA)

References: Abbott Alinity c Valproic Acid Reagent Kit Instructions for Use, Abbott Laboratories Diagnostics Division, Abbott Park, IL, 60064, USA. October 2018

Abbott Alinity c TDM Multiconstituent Calibrator Package Insert, Abbott Laboratories Diagnostics Division, Abbott Park, IL, 60064, USA. July 2018

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Clinical Significance, Dade Behring Inc., Glasgow Business Community, Mailbox 531, P.O. Box 6101, Newark, Delaware 19714

Jacobs & DeMott Laboratory Test Handbook (2001) Lexi-Comp, Inc, Hudson, OH, 5th Edition

Bio-Rad Liquichek Unassayed Chemistry Control Product Insert, Bio-Rad Laboratories, Irvine, CA 92618

Bio-Rad Liquichek Immunassay Plus Package Insert, Bio-Rad Laboratories, Irvine, CA, USA

Updates: 5/1/2005: Critical value changed, previously listed as >150 ug/mL.
2/9/2016: Update alt tube type
11/25/2020: Updated method Abbott Alinity, removed method Siemens Vista