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**Lab Dept:** Chemistry

**Test Name:** VALPROIC ACID LEVEL

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***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.

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***Logistics***

**Test Indications:** Valproic acid is used for treatment of seizures. Valproic acid may be used in conjunction with other antiepileptics 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

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***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.

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

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### ***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:** VALP Flex® reagent cartridge insert sheet, Siemens Healthcare Diagnostics Inc, 2008-02-29 717078.001 – US, Rev E

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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

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

**Updates:** 5/1/2005: Critical value changed, previously listed as >150 ug/mL.  
2/9/2016: Update alt tube type