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**Lab Dept:** Chemistry

**Test Name:** ACETAMINOPHEN LEVEL

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***General Information***

**Lab Order Codes:** ACET

**Synonyms:** Tylenol®, Datril®, Excedrin®, Liquiprin®, Tempra®

**CPT Codes:** 80329 – Analgesics, non-opioid; 1 or 2  
OR  
G0480 – Drug, test, definitive (if appropriate)

**Test Includes:** Acetaminophen concentration in mcg/mL.

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***Logistics***

**Test Indications:** Useful for therapeutic drug monitoring and evaluation of acetaminophen toxicity. This commonly used analgesic drug may cause severe hepatic toxicity or death when consumed in overdose quantities.

**Lab Testing Sections:** Chemistry

**Phone Numbers:** MIN Lab: 612-813-6280  
STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 4 hours, Stat: 1 hour

**Special Instructions:** N/A

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***Specimen***

**Specimen Type:** Blood

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

**Draw Volume:** 0.6 mL blood

**Processed Volume:** 0.2 mL serum/plasma

|                             |   |
|-----------------------------|---|
| <b>Collection:</b>          | Routine venipuncture. Mix tubes containing anticoagulant by gentle inversion.   |
|                             | <b>Ingestion:</b> Specimen should be drawn 4 hours after ingestion for peak toxic level.  |
| <b>Special Processing:</b>  | Lab Staff: Centrifuge specimen, remove serum/plasma aliquot into plastic sample cup. Analyze immediately or store at refrigerated temperatures. |
| <b>Patient Preparation:</b> | None  |
| <b>Sample Rejection:</b>    | Mislabeled or unlabeled specimen  |

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### ***Interpretive***

**Reference Range:** Therapeutic concentration: 10-25 mcg/mL

**Critical Values:** >25 mcg/mL

**Limitations:** Bilirubin (5 mg/dL), IgG (5 g/dL) and/or Total Protein (12 g/dL) decrease the acetaminophen result by 20-60%.

**Methodology:** Enzymatic

**References:** Siemens Dimension Vista® ACTM Flex® reagent Instructions for Use, Siemens Healthcare Diagnostics, PN 781088.001, Issue date, 2012-10-29, Rev H

Siemens Dimension ACTM® Flex reagent Instructions for Use, Siemens Healthcare Diagnostics, Newark, DE 19714, 03/06/2008, Version F

Siemens Dimension Vista® Drug 2 Calibrator Instructions for Use, Issue date 9/2012

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

**Updates:** 2/1/2012: Critical value update.  
9/10/2014: Limitations added.  
2/2/2016: CPT update, tube type update