### General Information

**Lab Order Codes:** SALI  
**Synonyms:** Aspirin level; ASA Level; Acetylsalicylic Acid  
**CPT Codes:**  
- 80329 – Analgesics, non-opiod; 1 or 2  
- OR  
- G0480 – Drug, test, definitive (if appropriate)  
**Test Includes:** Salicylate concentration reported in mg/dL.

### Logistics

**Test Indications:** Aspirin has analgesic, antipyretic, and anti-inflammatory properties. Measurement of serum salicylate concentration is important in diagnosis and treatment of overdose and in monitoring therapy.

**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  
**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 serum/plasma  
**Collection:** Routine venipuncture. 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

**Interpretive**

**Reference Range:**
Therapeutic concentration: 15 - 30 mg/dL

**Critical Values:**
Toxic concentration: >30 mg/dL
Lethal concentration: >70 mg/dL

**Limitations:**
Salicyluric acid cross reacts with this method.

Sulfapyridine at elevated levels (300 mg/L) may lead to falsely low results.

Sulfasalazine at elevated levels (300 mg/L) may lead to falsely high results.

Salicylate blood levels do not correlate well with degree of toxicity in chronic salicylism. Other drugs may displace protein-bound salicylate leading to increased toxicity. Salicylate doses inpatients on chronic therapy may approach toxic levels. Salicylate levels in such patients are best performed just prior to the next dose.

**Methodology:**
Enzymatic Colorimetric

**References:**
Abbott Alinity c Salicylate Reagent Kit Instructions for Use, Abbott Laboratories Diagnostics Division, Abbott Park, IL, 60064, USA. February 2018

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

Bio-Rad Liquichek Immunoassay Plus Package Insert, Bio-Rad Laboratories, Irvine, CA, 92618, USA


Bio-Rad Multiqual Chemistry Control Product Insert, Bio-Rad Laboratories, Irvine, CA 92618, USA
Updates:

2/4/2016: CPT update
2/9/2016: Update alt tube type
12/8/2020: Updated for method Abbott Alinity, method Siemens Vista removed