
Lab Dept: Chemistry

Test Name: URIC ACID, PATIENT ON RASBURICASE

General Information

Lab Order Codes: URICR for patients on Rasburicase

Synonyms: Uric Acid, [Patient on Rasburicase special handling required](#))

CPT Codes: 84550 – Uric acid; blood

Test Includes: Uric acid concentration reported in mg/dL.

Logistics

Test Indications: Uric acid is the end product of purine metabolism, either synthesized or dietary, and is normally cleared by the kidney. An increased level in joints is known as gout. Uric acid may also be increased with acidosis, uremia, and in conditions associated with tissue destruction, such as leukemia.

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: Patient on Rasburicase: Specimen needs to be placed on ice **immediately** after being drawn and sent on ice to the laboratory immediately for analysis.

Specimen

Specimen Type: Blood

Container: Green top (Li Heparin) tube **preferred**
Alternate tube: SST (Gold, marble or red top tube)

Draw Volume: 0.6 mL blood

Processed Volume: 0.2 mL plasma/serum

Collection:	Routine venipuncture. Mix tubes containing anticoagulant by gentle inversion. See Special instructions for Patients on Rasburicase
Special Processing:	Lab Staff: Centrifuge specimen, remove serum/plasma aliquot into a plastic sample cup. Store at refrigerated temperatures. For patients on Rasburicase: Process iced samples immediately and analyze as soon as possible.
Patient Preparation:	None
Sample Rejection:	Mislabeled or unlabeled specimen; specimens other than heparinized plasma or serum; Rasbuicase specimens not collected or stored on ice

Interpretive

Reference Range:	Age:	Reference Range (mg/dL):
	Male & Female	
	0 - <15 days:	2.8 – 12.7
	15 days - <1 year:	1.6 – 6.3
	1 - <12 years:	1.8 – 4.9
	Female	
	12 - <19 years:	2.6 – 5.9
	Adult:	2.6 – 6.0
	Male	
	12 - <19 years:	2.6 – 7.6
	Adult:	3.5 – 7.2

Critical Values: >10 mg/dL

Limitations: N-Acetyl-4-benzoquinone Imine (NAPQI), a metabolite of Acetaminophen at very high levels may lead to falsely low results. N-Acetyl-L-Cysteine at therapeutically achieved concentrations may lead to falsely low values.

Methodology: Uricase

References:

Abbott Alinity c Uric Acid Reagent Kit Instructions for Use, Abbott Laboratories Diagnostics Division, Abbott Park, IL, 60064, USA. December 2017

Abbott Alinity c Multiconstituent Calibrator Package Insert, Abbott Laboratories Diagnostics Division, Abbott Park, IL, 60064, USA. December 2017

Bio-Rad Liquichek Unassayed Multiquel 1,2,3, Package Insert, Bio-Rad Laboratories, Irvine, CA, USA

CALIPER Reference Interval Studies, access October 27, 2020, <https://caliper.research.sickkids.ca/#/>

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

Tietz Textbook of Clinical Chemistry (1999) 3rd Edition, W.B. Saunders Company, pp 50-51, 1245-1250

Bio-Rad Liquichek Unassayed Chemistry Control (Human) product insert, Irvine, CA

Bio-Rad Liquichek Urine Chemistry Control Product insert, Bio-Rad Laboratories, Irvine, CA 92618

Medical Device Correction Notice DC-16-02 (3/17/2016) Siemens Healthcare Diagnostics

Updates:

12/2/2010: Added information for patients on Rasburicase.

11/3/2011: Added rejection statement regarding specimens not collected or stored on ice.

9/16/2016: Update alternate tube type

11/25/2020: Updated for method Abbott Alinity, removed method Siemens Vista