
Lab Dept: Chemistry

Test Name: THIOPURINE METABOLITES

General Information

Lab Order Codes: P6MP

Synonyms: 6-thioguanine; 6-methylmercaptopurine; Thiopurine therapy; Propredict 6MP, 6TG; Imuran metabolite

CPT Codes: 82542 - Column chromatography, includes mass spectrometry, if performed, non-drug analytes, not elsewhere specified, qualitative or quantitative, each specimen

Test Includes: Quantitative High Pressure Liquid Chromatography for 6-thioguanine (6-TGN).

Quantitative High Pressure Liquid Chromatography for 6-methylmercaptopurine (6-MMPN).

Logistics

Test Indications: Provides red blood cell (RBC) levels of 6-thioguanine (6-TG) and 6-methyl-mercaptopurine (6-MMP). These target levels help monitor a patient's metabolism of azathioprine or 6-mercaptopurine and provide information regarding the "therapeutic window" on an individualized basis.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Medical Laboratories forward to Prometheus Laboratories, Inc. (Test: FPMET)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 4 - 7 days

Special Instructions: N/A

Specimen

Specimen Type: Whole blood

Container: Lavender top (EDTA) tube

Draw Volume: 5 mL (Pediatric Minimum: 3 mL) blood

Note: Submission of the Minimum volume will not allow repeat analysis. In some situations, a Minimum specimen volume may result in a QNS result, requiring a second sample to be collected.

Processed Volume: Same as Draw volume

Collection: Routine venipuncture

Special Processing: Lab Staff: Refrigerate specimen until shipped. This test must be shipped cool with cold packs only. **Do Not freeze.** Ship Monday through Thursday only. The blood is stable for <7 days at 2-8°C.

Patient Preparation: None

Sample Rejection: Specimens other than whole blood, frozen specimens, mislabeled or unlabeled specimens

Interpretive

Reference Range:

Metabolite:	Reference Range:
6-TGN	230 - 400
6-MMPN	<5700
Serial monitoring and graph information are mailed separately.	

Critical Values: N/A

Limitations: N/A

Methodology: High Pressure Liquid Chromatography (HPLC)

References: Prometheus GI Disease Management Client Services and package insert, 2004

[Mayo Medical Laboratories](#) October 2014

[Prometheus](#) October 2014

Updates: 3/25/2004: Test moved from a direct send to Prometheus Laboratories, Inc. to MML forward to Prometheus Laboratories, Inc.
1/26/2016:CPT update