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**Lab Dept:** Chemistry

**Test Name:** THIOPURINE METABOLITES

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***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).

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***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:** 5 - 7 days

**Special Instructions:** N/A

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***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.** The blood is stable for 8 days at 2-8°C.

**Patient Preparation:** None

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

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***Interpretive***

**Reference Range:**

<b>Metabolite:</b>	<b>Reference Range:</b>
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](#) December 2017

[Prometheus](#) December 2017

**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