

**Specimen Collected: 4/29/2026 14:59 MDT****Thiopurine Metabolites in RBC** | Received: 4/29/2026 15:00 MDT | Report/Verified: 4/29/2026 15:13 MDT

Procedure	Result	Units	Reference Interval
6-Thioguanine RBC	397 <sup>i1</sup>	pmol/8x10(8)RBC	[235-450]
6-Methylmercaptopurine RBC	4960	pmol/8x10(8)RBC	[<=5700]
Thiomet Interp	See Comment <sup>i2</sup>		

**Test Information**

i1: 6-Thioguanine RBC

i2: Thiomet Interp

INTERPRETIVE INFORMATION: Thiopurine Metabolites in RBC

Thiopurine drug therapy is used to treat autoimmune diseases, inflammatory bowel disease, acute lymphoblastic leukemia, and to prevent rejection after solid organ transplant. Thiopurine drugs are metabolized to active 6-thioguanine nucleotides, which are regulated by thiopurine methyltransferase (TPMT) and nudix hydrolase 15 (NUDT15). Certain variants in the TPMT and/or NUDT15 genes can be associated with an accumulation of cytotoxic metabolites that increase the risk of drug-related toxicity with standard doses of thiopurine drugs. Thiopurine metabolite concentrations are used to assess therapeutic and toxic concentrations of thiopurine drugs.

Methodology: Liquid Chromatography-Tandem Mass Spectrometry

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes.

\*=Abnormal, #=Corrected, C=Critical, f=Result Footnote, H-High, i-Test Information, L-Low, t-Interpretive Text, @=Performing lab

**Unless otherwise indicated, testing performed at:****ARUP Laboratories**

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