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# TPMT Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant TPMT.
Catalog # AT4320a

## Product Information

| | |
|---|---|
| **Application** | WB, IHC, IF |
| **Primary Accession** | P51580 |
| **Other Accession** | BC005339 |
| **Reactivity** | Human |
| **Host** | mouse |
| **Clonality** | monoclonal |
| **Isotype** | IgG1 kappa |
| **Clone Names** | 1B5 |
| **Calculated MW** | 28180 |

## Additional Information

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|---|---|
| **Gene ID** | 7172 |
| **Other Names** | Thiopurine S-methyltransferase, Thiopurine methyltransferase, TPMT |
| **Target/Specificity** | TPMT (AAH05339, 1 a.a. ~ 245 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa. |
| **Dilution** | WB~~1:500~1000 IHC~~1:100~500 IF~~1:50~200 |
| **Format** | Clear, colorless solution in phosphate buffered saline, pH 7.2 . |
| **Storage** | Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing. |
| **Precautions** | TPMT Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Background

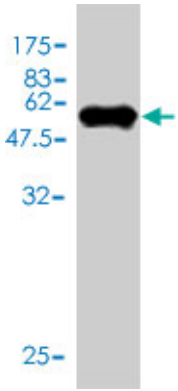
This gene encodes the enzyme that metabolizes thiopurine drugs via S-adenosyl-L-methionine as the S-methyl donor and S-adenosyl-L-homocysteine as a byproduct. Thiopurine drugs such as 6-mercaptopurine are used as chemotherapeutic agents. Genetic polymorphisms that affect this enzymatic activity are correlated with variations in sensitivity and toxicity to such drugs within individuals. A pseudogene for this locus is located on chromosome 18q.

## References

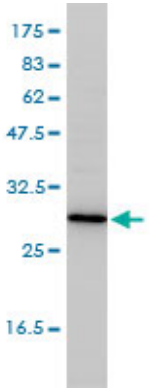
1.S-adenosylmethionine regulates thiopurine methyltransferase activity and decreases 6-mercaptopurine cytotoxicity in MOLT lymphoblasts.Milek M, Karas Kuzelicki N, Smid A, Mlinaric-Rascan I.Biochem Pharmacol.

2009 Jun 15;77(12):1845-53. Epub 2009 Mar 19.2.A novel gene delivery system for stable transfection of thiopurine-S-methyltransferase gene in versatile cell types.Egle R, Milek M, Mlinaric-Rascan I, Fahr A, Kristl J.Eur J Pharm Biopharm. 2008 May;69(1):23-30. Epub 2007 Oct 11.

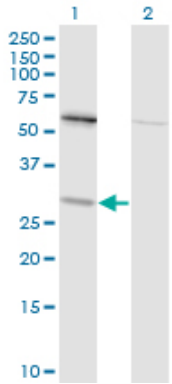
## Images




Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (52.69 KDa) .

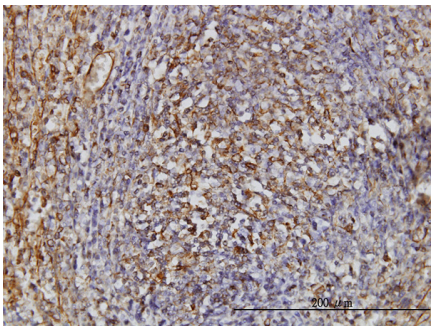



TPMT monoclonal antibody (M01), clone 1B5 Western Blot analysis of TPMT expression in Jurkat ( (Cat # AT4320a )



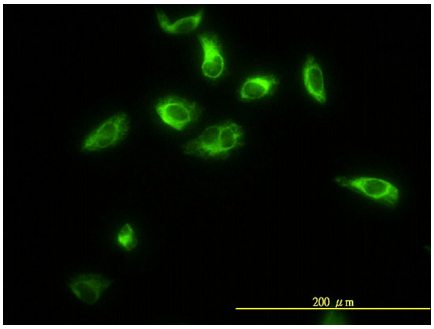

Western Blot analysis of TPMT expression in transfected 293T cell line by TPMT monoclonal antibody (M01), clone 1B5.

Lane 1: TPMT transfected lysate(28.2 KDa).
Lane 2: Non-transfected lysate.



Immunoperoxidase of monoclonal antibody to TPMT on formalin-fixed paraffin-embedded human spleen. [antibody concentration 1 ug/ml]

Immunofluorescence of monoclonal antibody to TPMT on HeLa cell. [antibody concentration 10 ug/ml]




Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.