

**TPMT Antibody (monoclonal) (M02)****Mouse monoclonal antibody raised against a full length recombinant TPMT.****Catalog # AT4321a****Specification**

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**TPMT Antibody (monoclonal) (M02) - Product Information**

|                   |                          |
|-------------------|--------------------------|
| Application       | WB, IF, E                |
| Primary Accession | <a href="#">P51580</a>   |
| Other Accession   | <a href="#">BC005339</a> |
| Reactivity        | Human                    |
| Host              | mouse                    |
| Clonality         | Monoclonal               |
| Isotype           | IgG1 Kappa               |
| Calculated MW     | 28180                    |

**TPMT Antibody (monoclonal) (M02) - Additional Information****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

IF~~1:50~200

E~~N/A

**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) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

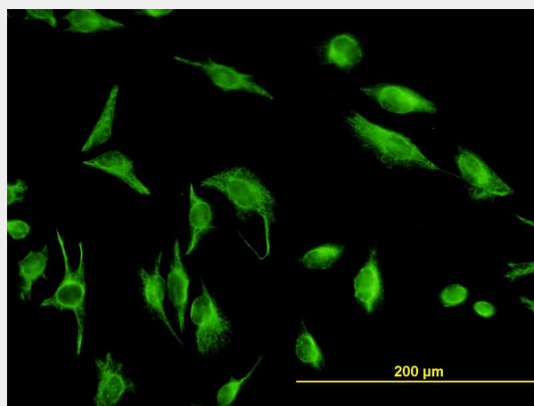
**TPMT Antibody (monoclonal) (M02) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

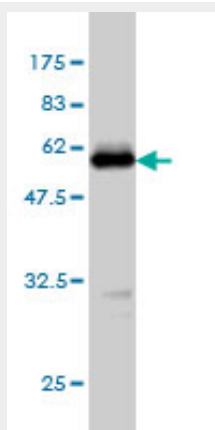
- [Western Blot](#)
- [Blocking Peptides](#)

- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

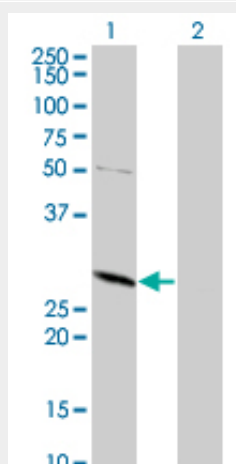
## TPMT Antibody (monoclonal) (M02) - Images



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



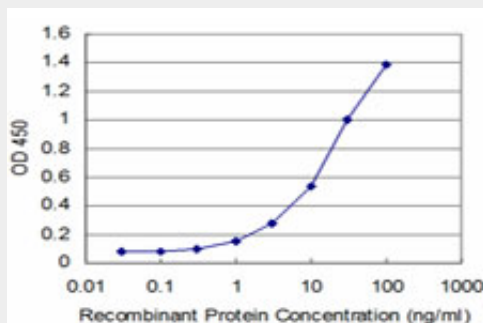
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (52.69 KDa) .



Western Blot analysis of TPMT expression in transfected 293T cell line by TPMT monoclonal antibody (M02), clone 1D4.

Lane 1: TPMT transfected lysate(28.2 KDa).

Lane 2: Non-transfected lysate.



Detection limit for recombinant GST tagged TPMT is approximately 1ng/ml as a capture antibody.

### **TPMT Antibody (monoclonal) (M02) - 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.

### **TPMT Antibody (monoclonal) (M02) - References**

Variation at the NFATC2 Locus Increases the Risk of Thiazolidinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086. Thiopurine S-methyltransferase polymorphisms and thiopurine toxicity in treatment of inflammatory bowel disease. Dong XW, et al. World J Gastroenterol, 2010 Jul 7. PMID 20593505. Genetic analysis of thiopurine methyltransferase polymorphism in the Jordanian population. Hakooz N, et al. Eur J Clin Pharmacol, 2010 Oct. PMID 20521035. Frequency of thiopurine S-methyltransferase (TPMT) alleles in southeast Iranian population. Bahari A, et al. Nucleosides Nucleotides Nucleic Acids, 2010 Mar. PMID 20408054. Genetic variation in 3-hydroxy-3-methylglutaryl CoA reductase modifies the chemopreventive activity of statins for colorectal cancer. Lipkin SM, et al. Cancer Prev Res (Phila), 2010 May. PMID 20403997.