

### TPMT Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a full length recombinant TPMT. Catalog # AT4321a

# **Specification**

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

**Application** IF, WB, E **Primary Accession** P51580 Other Accession BC005339 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.  $\sim$  245 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

#### **Dilution**

WB~~1:500~1000

#### **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

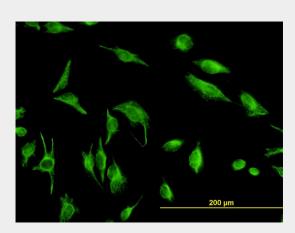
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

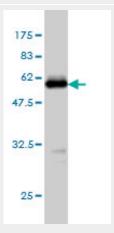


- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

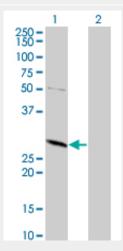
# **TPMT Antibody (monoclonal) (M02) - Images**



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).



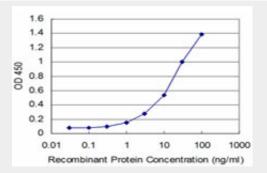
Western Blot analysis of TPMT expression in transfected 293T cell line by TPMT monoclonal



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 Thiazolinedinedione-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.