

TPMT Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a full length recombinant TPMT.

Catalog # AT4321a

Product Information

Application	WB, IF, E
Primary Accession	P51580
Other Accession	BC005339
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	1D4
Calculated MW	28180

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.

Background

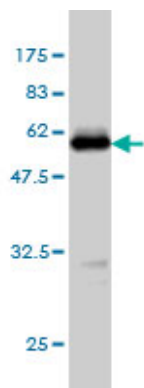
This gene encodes the enzyme that metabolizes thiopurine drugs via S-adenosyl-L-methionine as the S-methyl donor and S-adenosyl-L-homocysteine as a byproduct. Thiopurine drugs such as 6-mercaptopurine are used as chemotherapeutic agents. Genetic polymorphisms that affect this enzymatic activity are correlated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

References

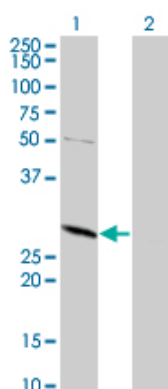
Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes

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.

Images

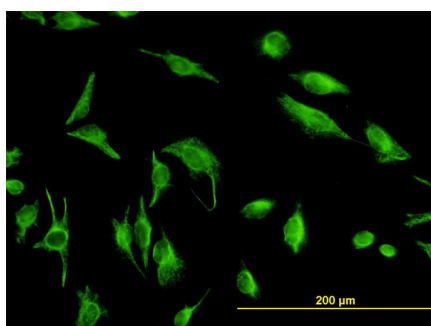


Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (52.69 KDa) .

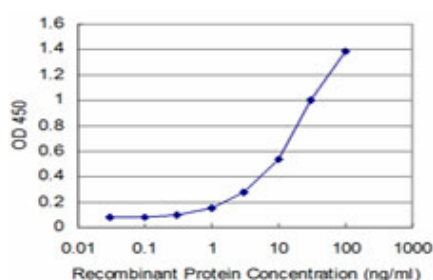


Western Blot analysis of TPMT expression in transfected 293T cell line by TPMT monoclonal antibody (M02), clone 1D4.

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



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



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

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