

## TPMT (K-18): sc-47506

### BACKGROUND

Thiopurine S-methyltransferase (TPMT), also designated thiopurine methyltransferase, acts as a catalyst for the S-methylation of thiopurine drugs such as 6-mercaptopurine. TPMT, usually found as a monomer, is inhibited by S-adenosyl-L-homocysteine. It is a cytoplasmic protein belongs to the TPMT subfamily of the larger methyltransferase superfamily of proteins. TPMT activity varies among different ethnic groups, with a large majority of Caucasians having a high TPMT activity. A common genetic polymorphism controls the level of TPMT activity. The level of TPMT activity is associated with the variation in efficacy and toxicity of thiopurine drugs.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: TPMT (human) mapping to 6p22.3; Tpm1 (mouse) mapping to 13 A5.

### SOURCE

TPMT (K-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TPMT of human origin.

### PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-47506 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

TPMT (K-18) is recommended for detection of TPMT of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

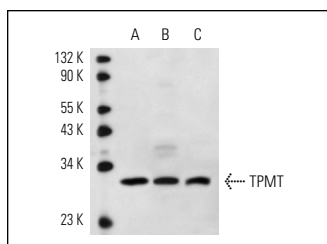
TPMT (K-18) is also recommended for detection of TPMT in additional species, including equine.

Suitable for use as control antibody for TPMT siRNA (h): sc-61701, TPMT siRNA (m): sc-61702, TPMT shRNA Plasmid (h): sc-61701-SH, TPMT shRNA Plasmid (m): sc-61702-SH, TPMT shRNA (h) Lentiviral Particles: sc-61701-V and TPMT shRNA Plasmid (m): sc-61702-SH.

Molecular Weight of TPMT: 32 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, HEL 92.1.7 cell lysate: sc-2270 or TF-1 cell lysate: sc-2412.

### DATA



TPMT (K-18): sc-47506. Western blot analysis of TPMT expression in K-562 (A), HEL 92.1.7 (B) and TF-1 (C) whole cell lysates.

### STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.



Try **TPMT (E-8): sc-374154**, our highly recommended monoclonal alternative to TPMT (K-18).