SANTA CRUZ BIOTECHNOLOGY, INC.

TPMT (N-13): sc-47507

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

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CHROMOSOMAL LOCATION

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

SOURCE

TPMT (N-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus 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-47507 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TPMT (N-13) is recommended for detection of TPMT of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 (N-13) is also recommended for detection of TPMT in additional species, including equine and bovine.

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 (m) Lentiviral Particles: sc-61702-V.

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.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

MONOS Satisfaction Guaranteed

Try **TPMT (E-8): sc-374154**, our highly recommended monoclonal alternative to TPMT (N-13).