abcam

Product datasheet

Anti-TPMT antibody [EPR10821(B)] ab166909

KO VALIDATED Recombinant RabMAb

4 Images

Overview

Product name	Anti-TPMT antibody [EPR10821(B)]
Description	Rabbit monoclonal [EPR10821(B)] to TPMT
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), WB **Unsuitable for:** ICC/IF,IHC-P or IP
Species reactivity	**Reacts with:** Mouse, Human **Predicted to work with:** Rat
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	K562, HepG2, Jurkat, TF-1 cell lysate. K562 cells.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 0.31% Sodium citrate, 0.175% Sodium chloride, 0.0172% EDTA, 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR10821(B)

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab166909 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/100 - 1/500. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/5000. Predicted molecular weight: 28 kDa.

Application notes Is unsuitable for ICC/IF,IHC-P or IP.

Target

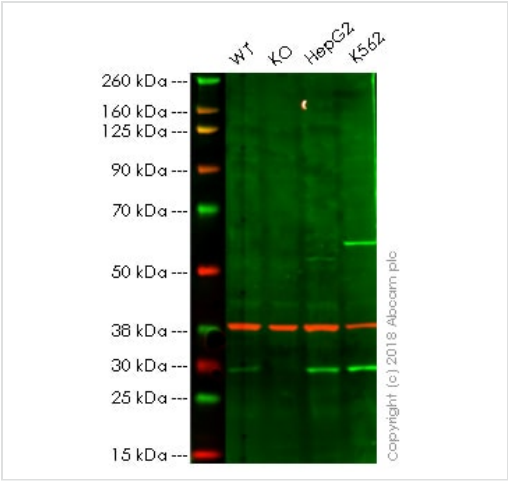
Function Catalyzes the S-methylation of thiopurine drugs such as 6-mercaptopurine.

Involvement in disease Defects in TPMT are the cause of thiopurine S-methyltransferase deficiency (TPMT deficiency) [MIM:610460]. TPMT is an enzyme involved in the normal metabolic inactivation of thiopurine drugs. These drugs are generally used as immunosupressants or cytotoxic drugs and are prescribed for a variety of clinical conditions including leukemia, autoimmune disease and organ transplantation. Patients with intermediate or no TPMT activity are at risk of toxicity after receiving standard doses of thiopurine drugs and it is shown that inter-individual differences in response to these drugs are largely determined by genetic variation at the TPMT locus.

Sequence similarities Belongs to the methyltransferase superfamily. TPMT family.

Cellular localization Cytoplasm.

Images



Western blot - Anti-TPMT antibody [EPR10821(B)] (ab166909)

All lanes : Anti-TPMT antibody [EPR10821(B)] (ab166909) at 1/1000 dilution

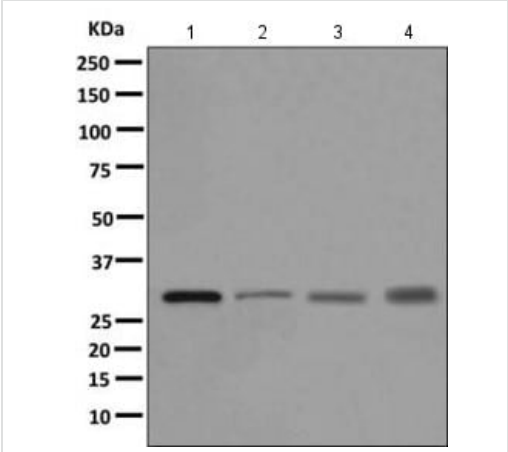
Lane 1 : Wild-type HAP1 whole cell lysate
Lane 2 : TPMT knockout HAP1 whole cell lysate
Lane 3 : HepG2 whole cell lysate
Lane 4 : K562 whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 28 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab166909 observed at 28 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

ab166909 was shown to recognize TPMT in wild-type HAP1 cells as signal was lost at the expected MW in TPMT knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and TPMT knockout samples were subjected to SDS-PAGE. Ab166909 and **ab9484** (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



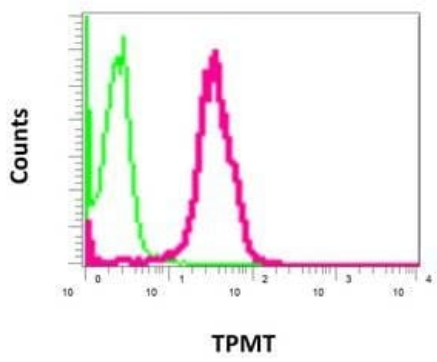
Western blot - Anti-TPMT antibody [EPR10821(B)] (ab166909)

All lanes : Anti-TPMT antibody [EPR10821(B)] (ab166909) at 1/1000 dilution

Lane 1 : K562 cell lysate
Lane 2 : HepG2 cell lysate
Lane 3 : Jurkat cell lysate
Lane 4 : TF-1 cell lysate

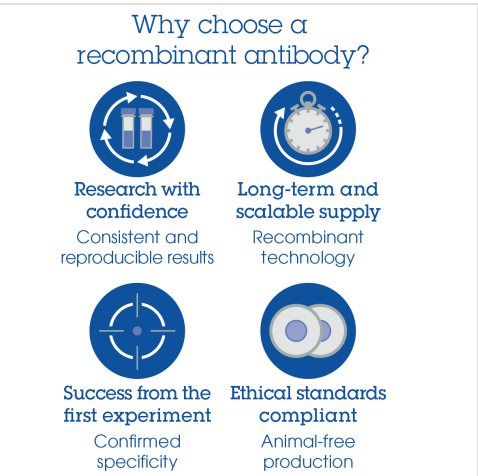
Lysates/proteins at 10 µg per lane.

Predicted band size: 28 kDa



Flow Cytometry (Intracellular) - Anti-TPMT antibody [EPR10821(B)] (ab166909)

Intracellular flow cytometric analysis of permeabilized K562 cells using ab166909 at a 1/100 dilution (red) or a rabbit IgG (negative) (green).



Anti-TPMT antibody [EPR10821(B)] (ab166909)

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