# abcam

### Product datasheet

## Anti-TPMT antibody [EPR10820(B)] ab155284





#### 1 References 9 Images

#### Overview

**Product name** Anti-TPMT antibody [EPR10820(B)]

**Description** Rabbit monoclonal [EPR10820(B)] to TPMT

**Host species** Rabbit

**Tested applications** Suitable for: Flow Cyt (Intra), WB, IHC-P

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

HAP1, K562, TF1, Jurkat and HepG2 cell lysates; Human brain and kidney tissue; Permeabilized Positive control

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. Store at -20°C.

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

**Purity** Protein A purified

Clonality Monoclonal Clone number EPR10820(B)

**Isotype** IgG

#### **Applications**

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab155284 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 lgG, is suitable for use as an isotype control with this antibody.
WB		1/1000 - 1/10000. Predicted molecular weight: 28 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

**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.

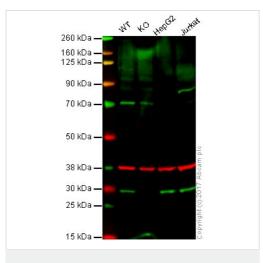
Sequence similarities

Belongs to the methyltransferase superfamily. TPMT family.

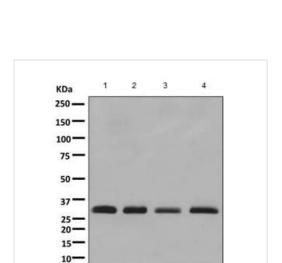
**Cellular localization** 

Cytoplasm.

#### **Images**



Western blot - Anti-TPMT antibody [EPR10820(B)] (ab155284)



Western blot - Anti-TPMT antibody [EPR10820(B)] (ab155284)

Lane 1: Wild-type HAP1 whole cell lysate (20 µg)

Lane 2: TPMT knockout HAP1 whole cell lysate (20 µg)

Lane 3: HepG2 whole cell lysate (20 µg)

Lane 4: Jurkat whole cell lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - ab155284 observed at 28 kDa. Red - loading control, <u>ab9484</u>, observed at 37 kDa.

ab155284 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. Ab155284 and <a href="mailto:ab9484">ab9484</a> (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 2 µg/ml and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preabsorbed <a href="mailto:ab216773">ab216773</a> and Goat anti-Mouse lgG H&L (IRDye® 680RD) preabsorbed <a href="mailto:ab216776">ab216776</a> secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.

**All lanes :** Anti-TPMT antibody [EPR10820(B)] (ab155284) at 1/1000 dilution

Lane 1: K562 cell lysate

Lane 2: TF1 cell lysate

Lane 3: Jurkat cell lysate

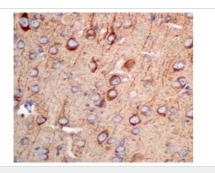
Lane 4: HepG2 cell lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

All lanes: Goat anti-rabbit HRP at 1/2000 dilution

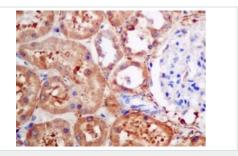
Predicted band size: 28 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TPMT antibody
[EPR10820(B)] (ab155284)

Immunohistochemical analysis of paraffin-embedded Human brain tissue labeling TPMT with ab155284 at 1/100 dilution.

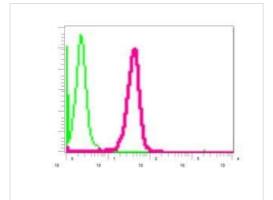
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TPMT antibody
[EPR10820(B)] (ab155284)

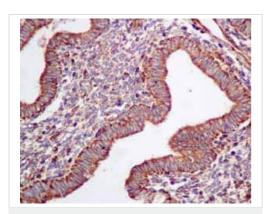
Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling TPMT with ab155284 at 1/100 dilution.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-TPMT antibody [EPR10820(B)] (ab155284)

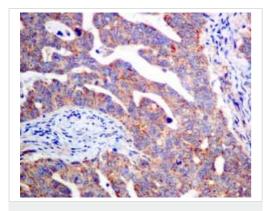
Intracellular flow cytometric analysis of permeabilized K562 cells labeling TPMT with ab155284 at 1/100 dilution (red) compared with a rabbit lgG (negative) (green).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TPMT antibody
[EPR10820(B)] (ab155284)

Immunohistochemical analysis of paraffin embedded Human normal uterus tissue using ab155284 showing +ve staining.

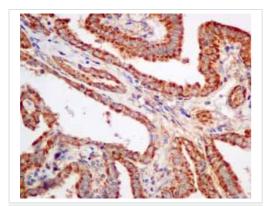
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TPMT antibody
[EPR10820(B)] (ab155284)

Immunohistochemical analysis of paraffin embedded Human gastric adenocarcinoma tissue using ab155284 showing +ve staining.

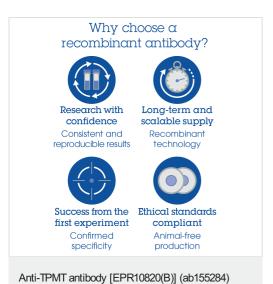
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TPMT antibody
[EPR10820(B)] (ab155284)

Immunohistochemical analysis of paraffin embedded Human thyroid gland carcinoma tissue using ab155284 showing +ve staining.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



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