abcam

Product datasheet

Anti-Thymidine Phosphorylase antibody [EPR25629-129] ab284861

Recombinant RabMAb

9 Images

Overview

Product name	Anti-Thymidine Phosphorylase antibody [EPR25629-129]
Description	Rabbit monoclonal [EPR25629-129] to Thymidine Phosphorylase
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), WB, ICC/IF, IHC-P, IP
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human tonsil, human ovary cancer, human colon and human liver, A431 lysates. IHC-P: Human tonsil and Human colon, Human ovarian cancer tissues. ICC/IF: A431, THP-1 cells. Flow Cyt: A431 cell. IP: A431 cell.
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 +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal

Clone number	EPR25629-129
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab284861 in the following tested applications.

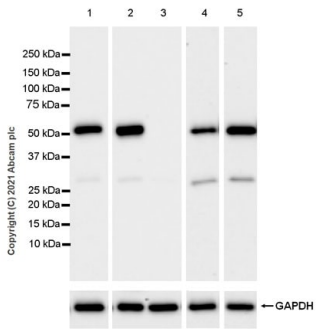
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/500.
WB		1/1000. Predicted molecular weight: 50 kDa.
ICC/IF		1/50.
IHC-P		1/5000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
IP		1/30.

Target

Function	May have a role in maintaining the integrity of the blood vessels. Has growth promoting activity on endothelial cells, angiogenic activity in vivo and chemotactic activity on endothelial cells in vitro. Catalyzes the reversible phosphorolysis of thymidine. The produced molecules are then utilized as carbon and energy sources or in the rescue of pyrimidine bases for nucleotide synthesis.
Pathway	Pyrimidine metabolism; dTMP biosynthesis via salvage pathway; dTMP from thymine: step 1/2.
Involvement in disease	Mitochondrial DNA depletion syndrome 1 (MTDPS1) [MIM:603041]: A multisystem disease associated with mitochondrial dysfunction. It is clinically characterized by onset between the second and fifth decades of life, ptosis, progressive external ophthalmoplegia, gastrointestinal dysmotility (often pseudoobstruction), diffuse leukoencephalopathy, cachexia, peripheral neuropathy, and myopathy. Note=The disease is caused by mutations affecting the gene represented in this entry.
Sequence similarities	Belongs to the thymidine/pyrimidine-nucleoside phosphorylase family.

Images



Western blot - Anti-Thymidine Phosphorylase antibody [EPR25629-129] (ab284861)

All lanes : Anti-Thymidine Phosphorylase antibody [EPR25629-129] (ab284861) at 1/1000 dilution

Lane 1 : Human tonsil tissue lysate
Lane 2 : human ovary cancer tissue lysate
Lane 3 : human ovary tissue lysate
Lane 4 : human colon tissue lysate
Lane 5 : human liver tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : VeriBlot for IP Detection Reagent (HRP) (**ab131366**) at 1/1000 dilution (VeriBlot for IP secondary antibody(HRP) (**ab131366**))

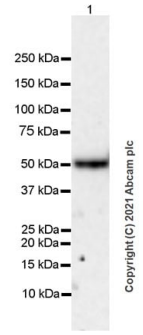
Predicted band size: 50 kDa
Observed band size: 50 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST

Low expression: human ovary (PMID:2328255).

The bands nearby 25 kDa could be non-specific bands.

Exposure time: Lane 1-3: 3.25 seconds Lane 4-5: 37 seconds



Western blot - Anti-Thymidine Phosphorylase antibody [EPR25629-129] (ab284861)

Anti-Thymidine Phosphorylase antibody [EPR25629-129] (ab284861) at 1/1000 dilution + A431 (human epidermoid carcinoma epithelial cell), whole cell lysate at 20 µg

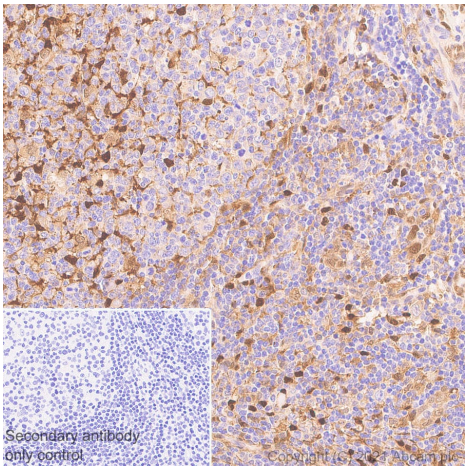
Secondary

VeriBlot for IP secondary antibody(HRP)(**ab131366**) at 1/5000 dilution

Predicted band size: 50 kDa
Observed band size: 50 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST

Exposure time: 137 seconds



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thymidine Phosphorylase antibody [EPR25629-129] (ab284861)

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labelling Thymidine phosphorylase with ab284861 at 1/5000 (0.103 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on human tonsil. The section was incubated with ab284861 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

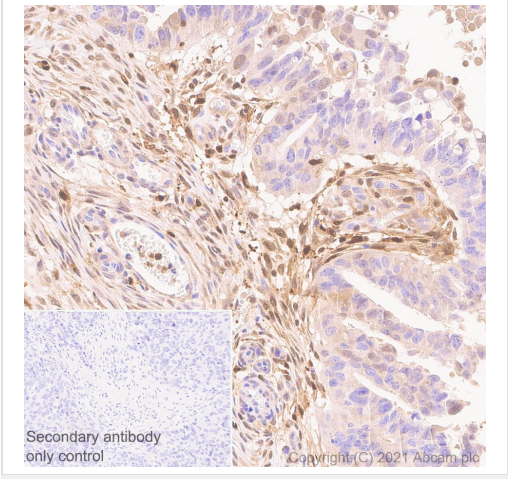
Heat mediated antigen retrieval with Citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thymidine Phosphorylase antibody [EPR25629-129] (ab284861)

Immunohistochemical analysis of paraffin-embedded Human colon tissue labelling Thymidine phosphorylase with ab284861 at 1/5000 (0.103 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on the interstitial cells of human colon (PMID:16361565). The section was incubated with ab284861 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with Citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins

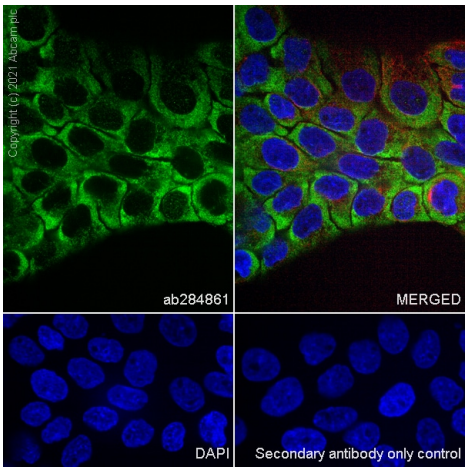


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Thymidine Phosphorylase antibody [EPR25629-129] (ab284861)

Immunohistochemical analysis of paraffin-embedded Human ovarian cancer tissue labelling Thymidine phosphorylase with ab284861 at 1/5000 (0.103 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on human ovarian cancer. The section was incubated with ab284861 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

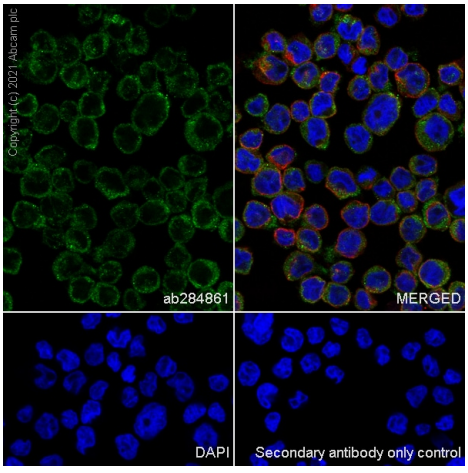
Heat mediated antigen retrieval with Citrate buffer (pH 6.0, epitope retrieval solution 1) for 20 mins



Immunocytochemistry/ Immunofluorescence - Anti-Thymidine Phosphorylase antibody [EPR25629-129] (ab284861)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized A431 cells labelling Thymidine phosphorylase with ab284861 at 1/50 (10.34 ug/ml) dilution, followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 (2 ug/ml) dilution (Green). Confocal image showing cytoplasmic staining in A431 cells is observed. **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 (2.5 ug/ml) dilution (Red). The Nuclear counterstain was DAPI (Blue).

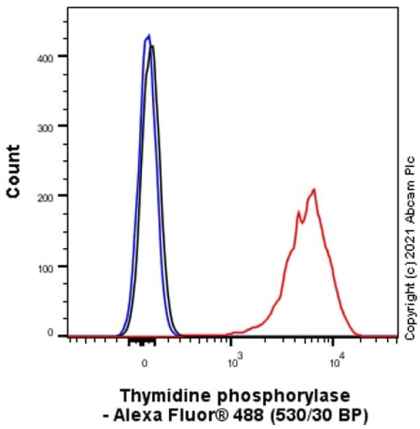
Secondary antibody only control: Secondary antibody is **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 (2 ug/ml) dilution.



Immunocytochemistry/ Immunofluorescence - Anti-Thymidine Phosphorylase antibody [EPR25629-129] (ab284861)

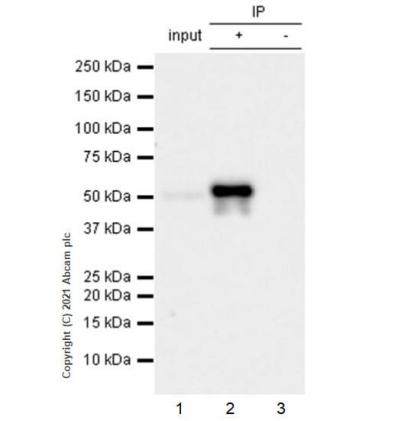
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized THP-1 cells labelling Thymidine phosphorylase with ab284861 at 1/50 (10.34 ug/ml) dilution, followed by **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 (2 ug/ml) dilution (Green). Confocal image showing cytoplasmic staining in THP-1 cells is observed. **ab195889** Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 (2.5 ug/ml) dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is **ab150081** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 (2 ug/ml) dilution.



Flow Cytometry (Intracellular) - Anti-Thymidine Phosphorylase antibody [EPR25629-129] (ab284861)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized A431 (Human epidermoid carcinoma epithelial cell) cells labelling Thymidine phosphorylase with ab284861 at 1/500 dilution (0.1ug)/(Red) compared with a Rabbit monoclonal IgG (**ab172730**)/(Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody)/(Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, **ab150081**) at 1/2000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-Thymidine Phosphorylase antibody [EPR25629-129] (ab284861)

Thymidine phosphorylase was immunoprecipitated from 0.35 mg A431 (human epidermoid carcinoma epithelial cell) whole cell lysate 10 ug with ab284861 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab284861 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(**ab131366**) was used at 1/5000 dilution.

Lane 1: A431 (human epidermoid carcinoma epithelial cell) whole cell lysate 10 ug

Lane 2: ab284861 IP in A431 whole cell lysate

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab284861 in A431 whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 10 seconds

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