abcam

Product datasheet

Anti-PKM antibody [EPR10138(B)] ab150377

Recombinant RabMAb

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Overview

Product name	Anti-PKM antibody [EPR10138(B)]
Description	Rabbit monoclonal [EPR10138(B)] to PKM
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), ICC/IF, WB
Species reactivity	**Reacts with:** Mouse, Rat, Human **Predicted to work with:** Pig
Immunogen	Synthetic peptide within Human PKM aa 50-150. The exact sequence is proprietary. Database link: **P14618**
Positive control	WB: HeLa, Jurkat, A549, Mouse lung, human skeletal muscle, rat skeletal muscle, mouse skeletal muscle lysates
General notes	We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team. 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: 7.20 Preservative: 0.01% Sodium azide

	Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR10138(B)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab150377 in the following tested applications.

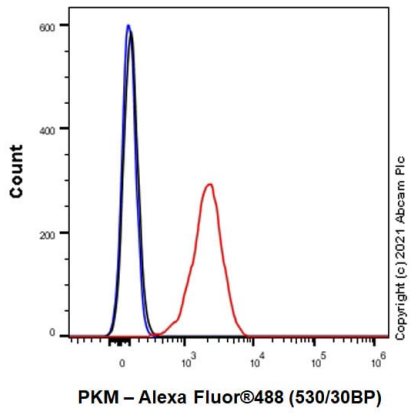
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/50. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF	★☆☆☆☆ (1)	1/50.
WB	★★★★★ (2)	1/10000. Predicted molecular weight: 58 kDa.

Target

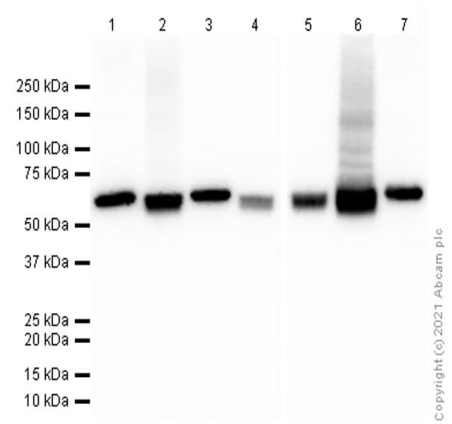
Function	Glycolytic enzyme that catalyzes the transfer of a phosphoryl group from phosphoenolpyruvate (PEP) to ADP, generating ATP. Stimulates POU5F1-mediated transcriptional activation. Plays a general role in caspase independent cell death of tumor cells. The ratio betwween the highly active tetrameric form and nearly inactive dimeric form determines whether glucose carbons are channeled to biosynthetic processes or used for glycolytic ATP production. The transition between the 2 forms contributes to the control of glycolysis and is important for tumor cell proliferation and survival.
Tissue specificity	Specifically expressed in proliferating cells, such as embryonic stem cells, embryonic carcinoma cells, as well as cancer cells.
Pathway	Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 5/5.
Sequence similarities	Belongs to the pyruvate kinase family.
Post-translational modifications	ISGylated. Under hypoxia, hydroxylated by EGLN3. Acetylation at Lys-305 is stimulated by high glucose concentration, it decreases enzyme activity and promotes its lysosomal-dependent degradation via chaperone-mediated autophagy. FGFR1-dependent tyrosine phosphorylation is reduced by interaction with TRIM35.
Cellular localization	Cytoplasm. Nucleus. Translocates to the nucleus in response to different apoptotic stimuli. Nuclear translocation is sufficient to induce cell death that is caspase independent, isoform-specific and independent of its enzymatic activity.

Images



Flow Cytometry (Intracellular) - Anti-PKM antibody [EPR10138(B)] (ab150377)

Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labelling PKM with Purified ab150377 at 1:50 dilution (10 µg/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor™ 488, **ab150077**) secondary antibody was used at 1:2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabelled control - Cell without incubation with primary antibody and secondary antibody (Blue).



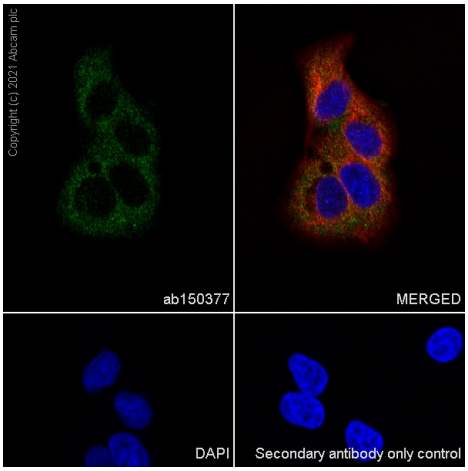
Western blot - Anti-PKM antibody [EPR10138(B)] (ab150377)

All lanes : Anti-PKM antibody [EPR10138(B)] (ab150377) at 1/10000 dilution (Purified)

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate
Lane 2 : Jurkat (Human T cell leukemia T lymphocyte) whole cell lysate
Lane 3 : A549 (Human lung carcinoma epithelial cell) whole cell lysate
Lane 4 : Mouse lung lysate
Lane 5 : Human skeletal muscle lysate
Lane 6 : Rat skeletal muscle lysate
Lane 7 : Mouse skeletal muscle lysate

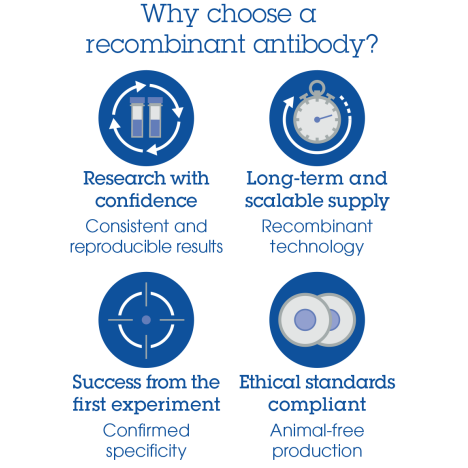
Secondary
All lanes : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 58 kDa
Observed band size: 58 kDa



Immunocytochemistry/ Immunofluorescence - Anti-PKM antibody [EPR10138(B)] (ab150377)

Immunocytochemistry analysis of A549(Human lung carcinoma epithelial cell) cells labeling PKM with Purified ab150377 at 1/50 dilution (10 µg/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A+H10:L10] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/mL). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/mL) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



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