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Product datasheet

HRP Anti-PGK1 antibody [22C5D8] ab197960

7 References 2 Images

Overview

Product name	HRP Anti-PGK1 antibody [22C5D8]
Description	HRP Mouse monoclonal [22C5D8] to PGK1
Host species	Mouse
Conjugation	HRP
Tested applications	**Suitable for:** WB, IHC-P
Species reactivity	**Reacts with:** Human, Saccharomyces cerevisiae
Immunogen	Full length native protein (purified) corresponding to PGK1.
Positive control	WB: Saccharomyces cerevisiae (Y190) cell lysate. IHC-P: FFPE human colon tissue sections.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot. Store at +4°C. Avoid freeze / thaw cycle. Store In the Dark.
Storage buffer	pH: 7.40 Preservative: 0.1% Proclin 300 Solution Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS
Purity	Proprietary Purification
Purification notes	Near homogeneity (Purity >95% by SDS-PAGE). The antibody was produced in vitro using hybridomas grown in serum-free medium, and then purified by chemical fractionation.
Clonality	Monoclonal
Clone number	22C5D8
Isotype	IgG1
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab197960 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
WB		1/5000. Detects a band of approximately 45 kDa (predicted molecular weight: 45 kDa).
IHC-P		1/70 - 1/80. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Function In addition to its role as a glycolytic enzyme, it seems that PGK-1 acts as a polymerase alpha cofactor protein (primer recognition protein).

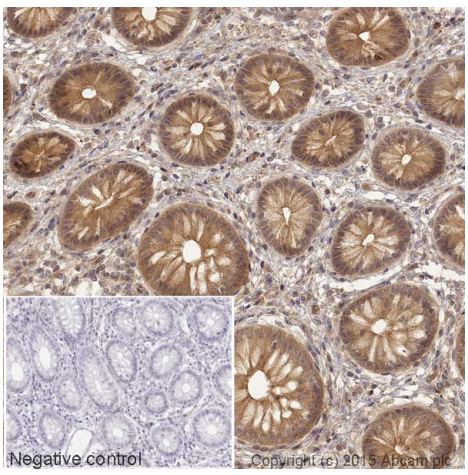
Pathway Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 2/5.

Involvement in disease Defects in PGK1 are the cause of phosphoglycerate kinase 1 deficiency (PGK1D) [MIM:300653]. It is a condition with a highly variable clinical phenotype that includes hemolytic anemia, rhabdomyolysis, myopathy and neurologic involvement. Patients can express one or more of these manifestations.

Sequence similarities Belongs to the phosphoglycerate kinase family.

Cellular localization Cytoplasm.

Images

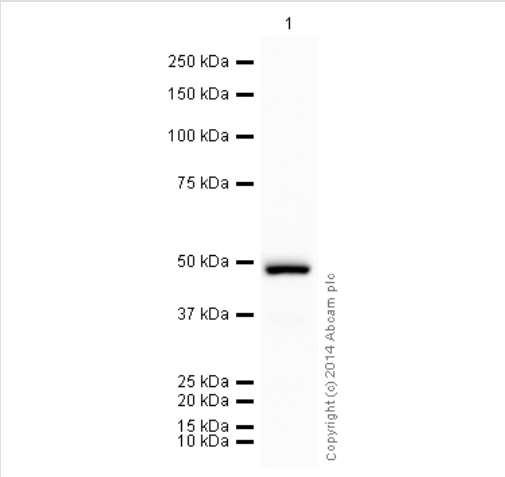


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - HRP Anti-PGK1 antibody [22C5D8] (ab197960)

IHC image of PGK1 staining in a section of formalin-fixed paraffin-embedded human normal colon*. The section was pre-treated using pressure cooker heat mediated antigen retrieval with sodium citrate buffer (pH6) for 30mins, and incubated overnight at +4°C with ab197960 at 1/71 dilution. DAB was used as the chromogen (**ab103723**), diluted 1/100 and incubated for 10min at room temperature. The section was counterstained with haematoxylin and mounted with DPX. The inset negative control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

**Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre*



Western blot - HRP Anti-PGK1 antibody [22C5D8] (ab197960)

HRP Anti-PGK1 antibody [22C5D8] (ab197960) at 1/5000 dilution + S.cerevisiae (Y190) Whole Cell Lysate at 20 µg

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 45 kDa
Observed band size: 45 kDa

Exposure time: 1 minute

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% milk before being incubated with ab197960 overnight at 4°C. Antibody binding was visualised using ECL development solution **ab133406**.

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