

Glucose 6 phosphate isomerase Recombinant Rabbit mAb

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Product Information

Application WB, IHC-P, IHC-F, IF

Host Rabbit
Clonality Recombinant
Calculated MW 63 KDa
Physical State Liquid

Immunogen A synthesized peptide derived from human GPI

Epitope Specificity 1-64/558 **Isotype** IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS(pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cytoplasm. Secreted. Belongs to the GPI family.

SUBUNIT Post-translational modificationsHomodimer in the catalytically active form, monomer in the secreted form.

Phosphorylation at Ser-185 by CK2 has been shown to decrease enzymatic activity and may contribute to secretion by a non-classical secretory pathway.

ISGylated.

DISEASE Defects in GPI are the cause of hemolytic anemia non-spherocytic due to

glucose phosphate isomerase deficiency (HA-GPID) [MIM:613470]. It is a form of anemia in which there is no abnormal hemoglobin or spherocytosis. It is caused by glucose phosphate isomerase deficiency. Severe GPI deficiency can

be associated with hydrops fetalis, immediate neonatal death and

neurological impairment.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions

This gene belongs to the GPI family whose members encode multifunctional phosphoglucose isomerase proteins involved in energy pathways. The protein

phosphoglucose isomerase proteins involved in energy pathways. The protein encoded by this gene is a dimeric enzyme that catalyzes the reversible

isomerization of glucose-6-phosphate and fructose-6-phosphate. The protein functions in different capacities inside and outside the cell. In the cytoplasm, the gene product is involved in glycolysis and gluconeogenesis, while outside the cell it functions as a neurotrophic factor for spinal and sensory neurons. Defects in this gene are the cause of nonspherocytic hemolytic anemia and a severe enzyme deficiency can be associated with hydrops fetalis, immediate neonatal death and neurological impairment. [provided by RefSeq, Jul 2008].

Additional Information

Dilution WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500

Format

0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

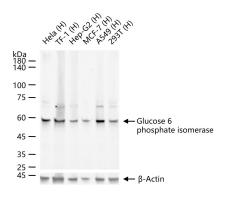
Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

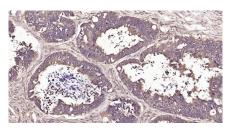
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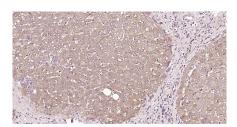
Images



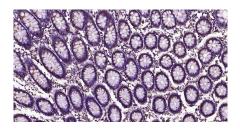
25 ug total protein per lane of various lysates (see on figure) probed with Glucose 6 phosphate isomerase monoclonal antibody, unconjugated (AP94817) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



Paraformaldehyde-fixed, paraffin embedded Human Colon Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Glucose 6 phosphate isomerase Monoclonal Antibody, Unconjugated(AP94817) at 1:250 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining.



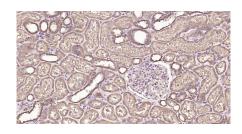
Paraformaldehyde-fixed, paraffin embedded Human Liver; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Glucose 6 phosphate isomerase Monoclonal Antibody, Unconjugated(AP94817) at 1:250 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining.

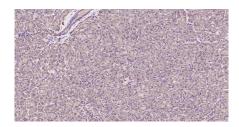


Paraformaldehyde-fixed, paraffin embedded Human Colon; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Glucose 6 phosphate isomerase Monoclonal Antibody, Unconjugated(AP94817) at 1:250 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining.



Paraformaldehyde-fixed, paraffin embedded Human Cerebrum; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Glucose 6 phosphate isomerase Monoclonal Antibody, Unconjugated(AP94817) at 1:250 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining.





Paraformaldehyde-fixed, paraffin embedded Human Kidney; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Glucose 6 phosphate isomerase Monoclonal Antibody, Unconjugated(AP94817) at 1:250 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining.

Paraformaldehyde-fixed, paraffin embedded Human Pancreas; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with Glucose 6 phosphate isomerase Monoclonal Antibody, Unconjugated(AP94817) at 1:250 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit, SP-0023) and DAB (C-0010) staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.