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SLC37A4 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58120

Specification

SLC37A4 Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, E**
Primary Accession	O43826
Reactivity	**Rat, Pig, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**46 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human G6PT2**
Epitope Specificity	**25-130/429**
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	**Endoplasmic reticulum membrane; Multi-pass membrane protein**
SIMILARITY	**Belongs to the major facilitator superfamily. Organophosphate:Pi antiporter (OPA) (TC 2.A.1.4) family.**
DISEASE	**Defects in SLC37A4 are the cause of glycogen storage disease type 1B (GSD1B) [MIM:232220]. GSD1B is a metabolic disorder characterized by impairment of terminal steps of glycogenolysis and gluconeogenesis. GSD1 patients manifest a wide range of clinical symptoms and biochemical abnormalities, including hypoglycemia, severe hepatomegaly due to excessive accumulation of glycogen, kidney enlargement, growth retardation, lactic acidemia, hyperlipidemia, and hyperuricemia. GSD1B patients also present a tendency towards infections associated with neutropenia, relapsing aphthous gingivostomatitis, and inflammatory bowel disease.Defects in SLC37A4 are the cause of glycogen storage disease type 1C (GSD1C) [MIM:232240]. Defects in SLC37A4 are the cause of glycogen storage disease type 1D (GSD1D) [MIM:232240].**
Important Note	**This product as supplied is intended for research use only, not for use in human,**

therapeutic or diagnostic applications.

Background Descriptions
SLC37A4 transports glucose-6-phosphate from the cytoplasm to the lumen of the endoplasmic reticulum. It forms a complex with glucose-6-phosphatase which is responsible for glucose production through glycogenolysis and gluconeogenesis. Hence, it plays a central role in homeostatic regulation of blood glucose levels.

SLC37A4 Polyclonal Antibody - Additional Information

Gene ID 2542

Other Names
Glucose-6-phosphate exchanger SLC37A4, Glucose-5-phosphate transporter, Glucose-6-phosphate translocase, Solute carrier family 37 member 4 {ECO:0000312|HGNC:HGNC:4061}, Transformation-related gene 19 protein {ECO:0000312|EMBL:AAS00495.1}, TRG-19 {ECO:0000312|EMBL:AAS00495.1}, SLC37A4 (HGNC:4061), G6PT, G6PT1

Target/Specificity
Mostly expressed in liver and kidney

Dilution
WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>E~~N/A

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

Storage
Store at -20 ℃ 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 ℃.

SLC37A4 Polyclonal Antibody - Protein Information

Name SLC37A4 (HGNC:4061)

Synonyms G6PT, G6PT1

Function
Inorganic phosphate and glucose-6-phosphate antiporter of the endoplasmic reticulum. Transports cytoplasmic glucose-6-phosphate into the lumen of the endoplasmic reticulum and translocates inorganic phosphate into the opposite direction (PubMed:33964207). Forms with glucose-6-phosphatase the complex responsible for glucose production through glycogenolysis and gluconeogenesis. Hence, it plays a central role in homeostatic regulation of blood glucose levels.

Cellular Location
Endoplasmic reticulum membrane; Multi-pass membrane protein

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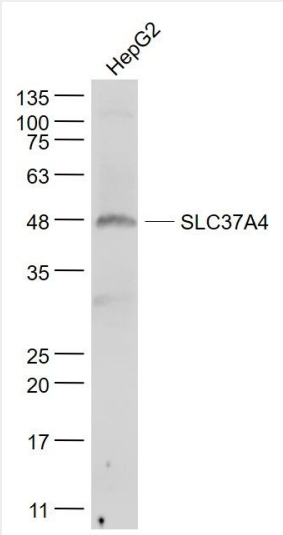
Tissue Location
Mostly expressed in liver and kidney.

SLC37A4 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SLC37A4 Polyclonal Antibody - Images



Sample:
HepG2 (Human) Cell Lysate at 30 ug
Primary: Anti- SLC37A4 (bs-4039R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 46 kD
Observed band size: 48 kD