

SLC25A25 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20508a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q6KCM7
Other Accession	Q7ZYD5 , Q8K3P6 , A2ASZ8 , Q0V7M4 , A2CEQ0
Reactivity	Human, Rat, Mouse
Predicted	Zebrafish, Bovine, Mouse, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	52663
Antigen Region	63-93

Additional Information

Gene ID	114789
Other Names	Calcium-binding mitochondrial carrier protein SCaMC-2, Mitochondrial ATP-Mg/Pi carrier protein 3, Mitochondrial Ca(2+)-dependent solute carrier protein 3, Small calcium-binding mitochondrial carrier protein 2, Solute carrier family 25 member 25, SLC25A25, APC3, KIAA1896, MCSC3, SCAMC2
Target/Specificity	This SLC25A25 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 63-93 amino acids from the N-terminal region of human SLC25A25.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SLC25A25 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SLC25A25 (HGNC:20663)
Function	Electroneutral antiporter that most probably mediates the transport of

adenyl nucleotides through the inner mitochondrial membrane (By similarity). Has calcium-dependent ATP-magnesium/inorganic phosphate antiporter activity (PubMed:[30080851](#), PubMed:[34346195](#)). Could also have a broader specificity for adenyl nucleotides (By similarity). By regulating the mitochondrial matrix adenyl nucleotide pool, could adapt to changing cellular energetic demands and indirectly regulate adenyl nucleotide-dependent metabolic pathways (By similarity). Acts downstream of Ca(2+)-permeable cation channel PKD2/TRPP2 and it is likely that PKD2-mediated Ca(2+) signaling activates SLC25A25 antiporter activity (By similarity). Required for left-right pattern specification (By similarity).

Cellular Location

Mitochondrion inner membrane; Multi-pass membrane protein

Tissue Location

Widely expressed. Expressed in fetal and adult liver, skeletal muscle, testis, ovary, hippocampus and caudate nucleus [Isoform 2]: Expression is restricted to kidney and lung.

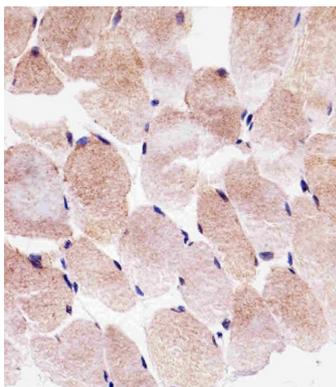
Background

Calcium-dependent mitochondrial solute carrier. Mitochondrial solute carriers shuttle metabolites, nucleotides, and cofactors through the mitochondrial inner membrane. May act as a ATP-Mg/Pi exchanger that mediates the transport of Mg-ATP in exchange for phosphate, catalyzing the net uptake or efflux of adenine nucleotides into or from the mitochondria.

References

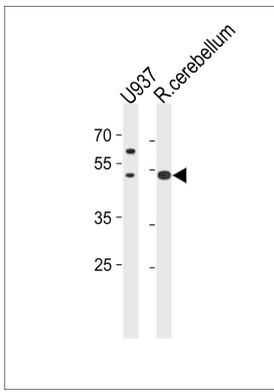
del Arco A., et al. J. Biol. Chem. 279:24701-24713(2004).
Fiermonte G., et al. J. Biol. Chem. 279:30722-30730(2004).
Nagase T., et al. DNA Res. 8:179-187(2001).
Clark H.F., et al. Genome Res. 13:2265-2270(2003).
Ota T., et al. Nat. Genet. 36:40-45(2004).

Images



Immunohistochemical analysis of paraffin-embedded H. skeletal muscle section using SLC25A25 Antibody (N-term)(Cat#AP20508A). AP20508A was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

SLC25A25 Antibody (N-term) (Cat. #AP20508a) western blot analysis in U-937 cell line and rat cerebellum tissue lysates (35ug/lane).This demonstrates the SLC25A25 antibody detected the SLC25A25 protein (arrow).



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