10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SLC25A12 Antibody (N-Term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10273a

Product Information

Application	WB, IHC-P, E
Primary Accession	O75746
Other Accession	NP_003696.2
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB27641
Calculated MW	74762
Antigen Region	1-30

Additional Information

Gene ID	8604
Other Names	Calcium-binding mitochondrial carrier protein Aralar1, Mitochondrial aspartate glutamate carrier 1, Solute carrier family 25 member 12, SLC25A12, ARALAR1
Target/Specificity	This SLC25A12 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human SLC25A12.
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	SLC25A12 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SLC25A12 (HGNC:10982)
Function	Mitochondrial electrogenic aspartate/glutamate antiporter that favors efflux

	of aspartate and entry of glutamate and proton within the mitochondria as part of the malate-aspartate shuttle (PubMed:11566871, PubMed:19641205, PubMed:24515575, PubMed:38945283). Also mediates the uptake of L-cysteinesulfinate (3-sulfino-L-alanine) by mitochondria in exchange of L-glutamate and proton (PubMed:11566871). Can also exchange L-cysteinesulfinate with aspartate in their anionic form without any proton translocation (PubMed:11566871). Lacks transport activity towards L-glutamine or gamma-aminobutyric acid (GABA) (PubMed:38945283).
Cellular Location	Mitochondrion inner membrane; Multi-pass membrane protein
Tissue Location	Expressed predominantly in the heart and skeletal muscle, weakly in brain and kidney.

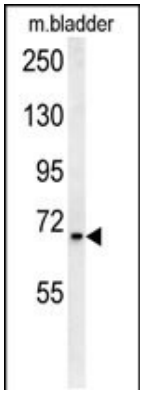
Background

This gene encodes a calcium-binding mitochondrial carrier protein. The encoded protein localizes to the mitochondria and is involved in the exchange of aspartate for glutamate across the inner mitochondrial membrane. Polymorphisms in the gene encoding this protein may be associated with risk of autism. [provided by RefSeq].

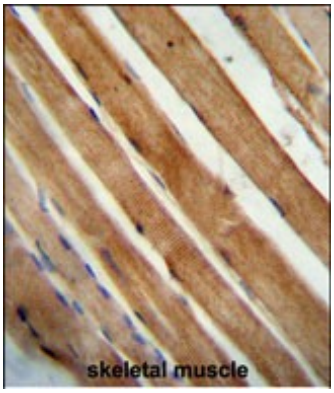
References

Maestrini, E., et al. Mol. Psychiatry 15(9):954-968(2010)
Chien, W.H., et al. Prog. Neuropsychopharmacol. Biol. Psychiatry 34(1):189-192(2010)
Chakrabarti, B., et al. Autism Res 2(3):157-177(2009)
Marmol, P., et al. J. Biol. Chem. 284(1):515-524(2009)
Turunen, J.A., et al. Autism Res 1(3):189-192(2008)

Images



SLC25A12 Antibody (N-Term) (Cat. #AP10273a) western blot analysis in mouse bladder tissue lysates (15ug/lane).This demonstrates the SLC25A12 antibody detected SLC25A12 protein (arrow).



SLC25A12 antibody (N-Term) (Cat. #AP10273a) immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the SLC25A12 antibody (N-Term) for immunohistochemistry. Clinical relevance has not been evaluated.

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