

**SLC25A12 Antibody (N-Term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP10273a****Specification**

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**SLC25A12 Antibody (N-Term) - Product Information**

Application	IHC-P, WB,E
Primary Accession	<a href="#">O75746</a>
Other Accession	<a href="#">NP_003696.2</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	74762
Antigen Region	1-30

**SLC25A12 Antibody (N-Term) - 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**

IHC-P~~1:50~100

WB~~1:1000

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.

**SLC25A12 Antibody (N-Term) - 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-cysteinesulfinic acid (3-sulfinic-L-alanine) by mitochondria in exchange of L-glutamate and proton (PubMed:[11566871](#)). Can also exchange L-cysteinesulfinic acid 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**

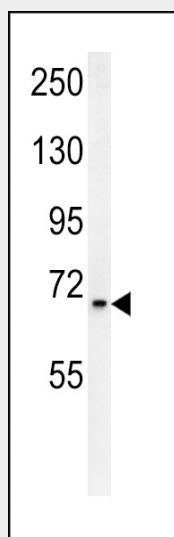
Expressed predominantly in the heart and skeletal muscle, weakly in brain and kidney.

**SLC25A12 Antibody (N-Term) - Protocols**

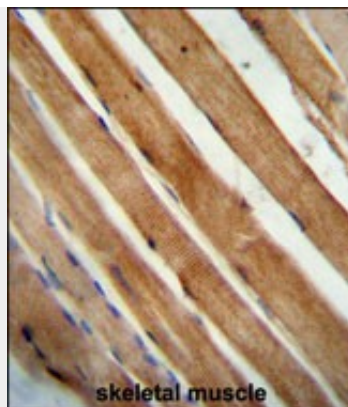
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**SLC25A12 Antibody (N-Term) - 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.

#### **SLC25A12 Antibody (N-Term) - 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].

#### **SLC25A12 Antibody (N-Term) - 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)