

ARALAR1 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51515**Specification**

ARALAR1 Antibody - Product Information

Application	WB
Primary Accession	O75746
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	75 KDa
Antigen Region	371 - 430

ARALAR1 Antibody - 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

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ARALAR1. The exact sequence is proprietary.

Dilution

WB~~ 1:1000

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

ARALAR1 Antibody - 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](http://www.uniprot.org/citations/11566871), PubMed: [19641205](http://www.uniprot.org/citations/19641205), PubMed: [24515575](http://www.uniprot.org/citations/24515575), PubMed: [38945283](http://www.uniprot.org/citations/38945283)). Also mediates the uptake of L-cysteinesulfinate (3-sulfino-L-alanine) by mitochondria in exchange of L-glutamate and proton (PubMed: [11566871](http://www.uniprot.org/citations/11566871))

target="_blank">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

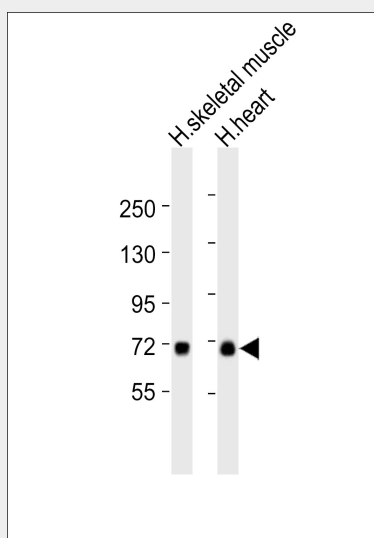
Expressed predominantly in the heart and skeletal muscle, weakly in brain and kidney.

ARALAR1 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 Cytometry](#)
- [Cell Culture](#)

ARALAR1 Antibody - Images



All lanes : Anti-ARALAR1 Antibody at 1:1000 dilution Lane 1: human skeletal muscle lysates Lane 2: human heart lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 75 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

ARALAR1 Antibody - Background

Catalyzes the calcium-dependent exchange of cytoplasmic glutamate with mitochondrial aspartate across the mitochondrial inner membrane. May have a function in the urea cycle.

ARALAR1 Antibody - References

Del Arco A.,et al.J. Biol. Chem. 273:23327-23334(1998).
Palmieri L.,et al.EMBO J. 20:5060-5069(2001).
Hillier L.W.,et al.Nature 434:724-731(2005).
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Kobayashi K.,et al.Nat. Genet. 22:159-163(1999).