

ARALAR Polyclonal Antibody

Catalog # AP68488

Product Information

| Application | WB, IHC-P |
|-------------------|---------------|
| Primary Accession | <u>075746</u> |
| Reactivity | Human |
| Host | Rabbit |
| Clonality | Polyclonal |
| Calculated MW | 74762 |

Additional Information

| Gene ID | 8604 |
|--------------------|---|
| Other Names | SLC25A12; ARALAR1; Calcium-binding mitochondrial carrier protein Aralar1; Mitochondrial aspartate glutamate carrier 1; Solute carrier family 25 member 12 |
| Dilution | WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A |
| Format | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide. |
| Storage Conditions | -20°C |

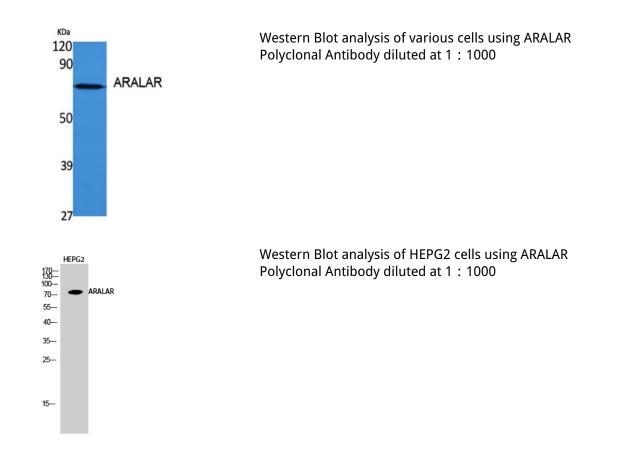
Protein Information

| Name | SLC25A12 (<u>HGNC:10982</u>) |
|-------------------|--|
| 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: <u>11566871</u> , PubMed: <u>19641205</u> , PubMed: <u>24515575</u> , PubMed: <u>38945283</u>). Also mediates the uptake of L-cysteinesulfinate (3-sulfino-L-alanine) by mitochondria in exchange of L-glutamate and proton (PubMed: <u>11566871</u>). Can also exchange L-cysteinesulfinate with aspartate in their anionic form without any proton translocation (PubMed: <u>11566871</u>). Lacks transport activity towards L-glutamine or gamma-aminobutyric acid (GABA) (PubMed: <u>38945283</u>). |
| 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

Mitochondrial and calcium-binding carrier that catalyzes the calcium-dependent exchange of cytoplasmic glutamate with mitochondrial aspartate across the mitochondrial inner membrane (PubMed:<u>11566871</u>, PubMed:<u>25410934</u>). May have a function in the urea cycle (PubMed:<u>11566871</u>).

Images



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