

KD-Validated Anti-SLC25A12 Rabbit Monoclonal Antibody
Rabbit monoclonal antibody
Catalog # AGI1727**Specification****KD-Validated Anti-SLC25A12 Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC
Primary Accession	O75746
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 75 kDa , observed , 72 kDa KDa
Gene Name	SLC25A12
Aliases	SLC25A12; Solute Carrier Family 25 Member 12; Aralar; AGC1; Electrogenic Aspartate/Glutamate Antiporter SLC25A12, Mitochondrial; Aralar1; Solute Carrier Family 25 (Mitochondrial Carrier, Aralar), Member 12; Solute Carrier Family 25 (Aspartate/Glutamate Carrier), Member 12; Mitochondrial Aspartate Glutamate Carrier 1; Aspartate/Glutamate Carrier 1; Araceli Hiperlarga; Calcium Binding Mitochondrial Carrier Superfamily Member Aralar1; Calcium-Binding Mitochondrial Carrier Protein Aralar1; ARALAR1; EIEE39; DEE39
Immunogen	A synthesized peptide derived from human SLC25A12

KD-Validated Anti-SLC25A12 Rabbit Monoclonal Antibody - Additional Information

Gene ID	8604
Other Names	
Electrogenic aspartate/glutamate antiporter SLC25A12, mitochondrial, Araceli hiperlarga, Aralar, Aralar1, Mitochondrial aspartate glutamate carrier 1, Solute carrier family 25 member 12 {ECO:0000312 HGNC:HGNC:10982}, SLC25A12 (HGNC:10982)	

KD-Validated Anti-SLC25A12 Rabbit Monoclonal 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, 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

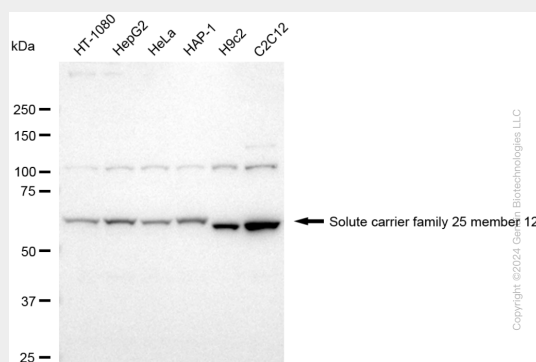
Expressed predominantly in the heart and skeletal muscle, weakly in brain and kidney.

KD-Validated Anti-SLC25A12 Rabbit Monoclonal Antibody - Protocols

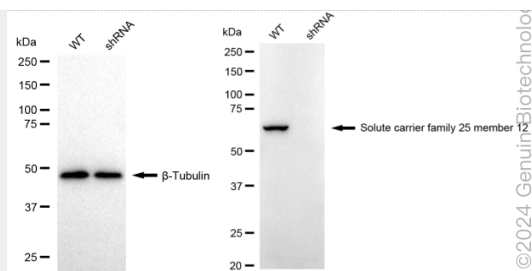
Provided below are standard protocols that you may find useful for product applications.

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

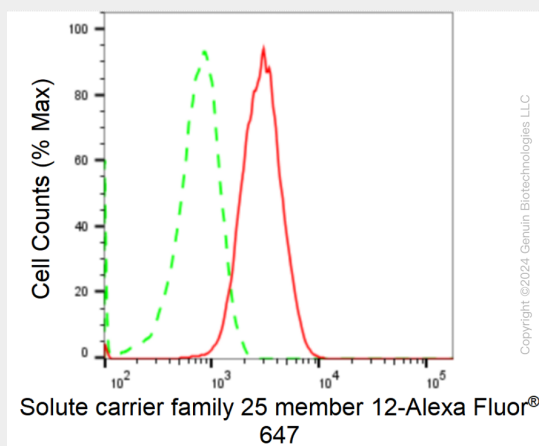
KD-Validated Anti-SLC25A12 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-solute carrier family 25 member 12 antibody (Cat#AGI1727). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-solute carrier family 25 member 12 antibody (Cat#AGI1727, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Solute carrier family 25 member 12 antibody (Cat#AGI1727). Solute carrier family 25 member 12 expression in wild type (WT) and Solute carrier family 25 member 12 shRNA knockdown (KD) HeLa cells with 20 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-Solute carrier family 25 member 12 antibody (Cat#AGI1727, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Solute carrier family 25 member 12 expression in C2C12 cells using anti-Solute carrier family 25 member 12 antibody (Cat#AGI1727, 1:2,000). Green, isotype control; red, Solute carrier family 25 member 12.