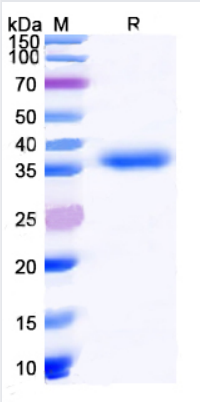
SLC25A12 Human Recombinant Protein

PRODUCT OVERVIEW

Product Name	SLC25A12, Recombinant Protein
Full Product Name	Recombinant Human SLC25A12 Protein, N-His
Product Gene Name	SLC25A12 recombinant protein
Product Synonym Names	Electrogenic aspartate/glutamate antiporter SLC25A12; mitochondrial; Araceli hiperlarga; Aralar; Aralar1; Mitochondrial aspartate glutamate carrier 1; Solute carrier family 25 member 12; SLC25A12; AGC1; ARALAR1
Sequence	Gly11-Gln3 11
Host	E coli
Form/Format	Lyophilized from a solution in PBS pH 7.4, 0.02% NLS, 1mM EDTA, 4% Trehalose, 1% Mannitol.
Purity/Purification	>90% as determined by SDS-PAGE.
Preparation and Storage	Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 2 to 8 degree C for frequent use. Store at -20 to -80 degree C for twelve months from the date of receipt.
Molecular Weight	74,762 Da
Chromosome Location	Chromosome: 2; NC_000002.11 (172639915..172750816, complement). Location: 2q24
OMIM	603667
3D Structure	ModBase 3D Structure for O75746
Species	Homo sapiens (Human)
Reconstitution	Reconstitute in sterile water for a stock solution. A copy of datasheet will be provided with the products, please refer to it for details.
Product Categories/Family for SLC25A12 recombinant protein	Recombinant Protein; Other Proteins; Proteins
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for SLC25A12 recombinant protein	ELISA (EIA), Immunogen, SDS-PAGE, Western Blot (WB), Bioactivity testing in progress
Related Product Information for SLC25A12 recombinant protein	MBS1587259 is a recombinant protein targeting SLC25A12. Also known as Recombinant Human SLC25A12 Protein, N-His. Host: E coli.
Other Notes	Small volumes of SLC25A12 recombinant protein vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



SDS-Page of SLC25A12 recombinant protein
SDS-PAGE for Recombinant Human SLC25A12 protein

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for SLC25A12. It may not necessarily be applicable to this product.

NCBI GI #	21361103
NCBI GeneID	8604
NCBI Accession #	NP_003696.2
UniProt Primary Accession #	O75746
UniProt Secondary Accession #	Q96AM8
UniProt Related Accession #	O75746
GenBank Nucleotide #	NM_003705.4
NCBI Official Full Name	calcium-binding mitochondrial carrier protein Aralar1
NCBI Official Synonym Full Names	solute carrier family 25 (aspartate/glutamate carrier), member 12
NCBI Official Symbol	SLC25A12
NCBI Official Synonym Symbols	AGC1; ARALAR
UniProt Protein Name	Calcium-binding mitochondrial carrier protein Aralar1
UniProt Synonym Protein Names	Mitochondrial aspartate glutamate carrier 1; Solute carrier family 25 member 12
UniProt Gene Name	SLC25A12
UniProt Synonym Gene Names	ARALAR1
UniProt Entry Name	CMC1_HUMAN
NCBI Protein Information	calcium-binding mitochondrial carrier protein Aralar1; araceli hiperlarga; mitochondrial aspartate glutamate carrier 1; calcium binding mitochondrial carrier superfamily member Aralar1; solute carrier family 25 (mitochondrial carrier, Aralar), member 12
NCBI Summary for SLC25A12	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 this gene may be associated with autism, and mutations in this gene may also be a cause of global cerebral hypomyelination. Alternatively spliced transcript variants have been observed for this gene. [provided by RefSeq, Apr 2012]

UniProt Comments for SLC25A12	SLC25A12: Catalyzes the calcium-dependent exchange of cytoplasmic glutamate with mitochondrial aspartate across the mitochondrial inner membrane. May have a function in the urea cycle. Defects in SLC25A12 are the cause of global cerebral hypomyelination (GCHM). A disorder with onset in infancy and characterized by severe psychomotor retardation, hypotonia, seizures, hypomyelination of the central nervous system, with the gray matter appearing relatively unaffected. Belongs to the mitochondrial carrier family. Protein type: Membrane protein, integral; Membrane protein, multi-pass; Mitochondrial; Transporter, SLC family; Transporter Chromosomal Location of Human Ortholog: 2q24 Cellular Component: mitochondrion; mitochondrial inner membrane; integral to membrane Molecular Function: L-aspartate transmembrane transporter activity; calcium ion binding; L-glutamate transmembrane transporter activity Biological Process: L-glutamate transport; carbohydrate metabolic process; glucose metabolic process; pathogenesis; aspartate transport; response to calcium ion; malate-aspartate shuttle; gluconeogenesis Disease: Hypomyelination, Global Cerebral
Research Articles on SLC25A12	**1.** The physiological roles of AGC1, its links to calcium homeostasis, and its involvement in autism pathogenesis, are reviewed.
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