

SLC25A15 Antibody (Center) Blocking peptide

Synthetic peptide Catalog # BP12166c

Specification

SLC25A15 Antibody (Center) Blocking peptide - Product Information

Primary Accession

09Y619

SLC25A15 Antibody (Center) Blocking peptide - Additional Information

Gene ID 10166

Other Names

Mitochondrial ornithine transporter 1, Solute carrier family 25 member 15, SLC25A15, ORNT1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SLC25A15 Antibody (Center) Blocking peptide - Protein Information

Name SLC25A15 (HGNC:10985)

Function

Mitochondrial ornithine-citrulline antiporter (PubMed:12807890, PubMed:22262851) (Probable). Catalyzes the exchange between cytosolic ornithine and mitochondrial citrulline plus an H(+), the proton compensates the positive charge of ornithine thus leading to an electroneutral transport. Plays a crucial role in the urea cycle, by connecting the cytosolic and the intramitochondrial reactions of the urea cycle (PubMed:12807890, PubMed:22262851(Probable). Lysine and arginine are also transported by the antiport mechanism (PubMed:12807890) (Probable). In addition, catalyzes an electroneutral exchange of ornithine or lysine for H(+), a reaction driven by the pH gradient across the inner membrane (By similarity).

Cellular Location

Mitochondrion inner membrane {ECO:0000250|UniProtKB:Q12375}; Multi-pass membrane protein. Mitochondrion membrane; Multi-pass membrane protein



Tissue Location

Highly expressed in liver, pancreas, testis, lung and small intestine. Lower levels are detected in spleen, kidney, brain and heart.

SLC25A15 Antibody (Center) Blocking peptide - Protocols

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

Blocking Peptides

SLC25A15 Antibody (Center) Blocking peptide - Images

SLC25A15 Antibody (Center) Blocking peptide - Background

This gene is a member of the mitochondrial carrier family. The encoded protein transports ornithine across the innermitochondrial membrane from the cytosol to the mitochondrialmatrix. The protein is an essential component of the urea cycle, and functions in ammonium detoxification and biosynthesis of theamino acid arginine. Mutations in this gene result inhyperornithinemia-hyperammonemia-homocitrullinuria (HHH) syndrome. There is a pseudogene of this locus on the Y chromosome.

SLC25A15 Antibody (Center) Blocking peptide - References

Sokoro, A.A., et al. J. Inherit. Metab. Dis. (2010) In press: Tessa, A., et al. Hum. Mutat. 30(5):741-748(2009)Debray, F.G., et al. J. Med. Genet. 45(11):759-764(2008)Al-Hassnan, Z.N., et al. J. Neurol. Sci. 264 (1-2), 187-194 (2008):Torisu, H., et al. Brain Dev. 28(5):332-335(2006)