

**SLC25A15 Antibody (Center) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP5563c****Specification**

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**SLC25A15 Antibody (Center) Blocking peptide - Product Information**

Primary Accession [O9Y619](#)  
Other Accession [NP\\_055067.1](#)

**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 (Probable) (PubMed:<a href="http://www.uniprot.org/citations/12807890" target="\_blank">12807890</a>, PubMed:<a href="http://www.uniprot.org/citations/22262851" target="\_blank">22262851</a>). 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 (Probable) (PubMed:<a href="http://www.uniprot.org/citations/12807890" target="\_blank">12807890</a>, PubMed:<a href="http://www.uniprot.org/citations/22262851" target="\_blank">22262851</a>). Lysine and arginine are also transported by the antiport mechanism (Probable) (PubMed:<a href="http://www.uniprot.org/citations/12807890" target="\_blank">12807890</a>). 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 inner mitochondrial membrane from the cytosol to the mitochondrial matrix. The protein is an essential component of the urea cycle, and functions in ammonium detoxification and biosynthesis of the amino acid arginine. Mutations in this gene result in hyperornithinemia-hyperammonemia-homocitrullinuria (HHH) syndrome. There is a pseudogene of this locus on the Y chromosome.

**SLC25A15 Antibody (Center) Blocking peptide - References**

Salvi, S., et al. Hum. Mutat. 18 (5), 460 (2001) Salvi, S., et al. Neurology 57(5):911-914(2001) Miyamoto, T., et al. J. Hum. Genet. 46(5):260-262(2001) Tsujino, S., et al. Ann. Neurol. 47(5):625-631(2000) Camacho, J.A., et al. Nat. Genet. 22(2):151-158(1999)