

SLC25A24 Antibody (N-term) Blocking peptide Synthetic peptide Catalog # BP13357a

## Specification

# SLC25A24 Antibody (N-term) Blocking peptide - Product Information

Primary Accession

<u>Q6NUK1</u>

# SLC25A24 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 29957

#### **Other Names**

Calcium-binding mitochondrial carrier protein SCaMC-1, Mitochondrial ATP-Mg/Pi carrier protein 1, Mitochondrial Ca(2+)-dependent solute carrier protein 1, Small calcium-binding mitochondrial carrier protein 1, Solute carrier family 25 member 24, SLC25A24, APC1, MCSC1, SCAMC1

#### Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13357a was selected from the N-term region of SLC25A24. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

# SLC25A24 Antibody (N-term) Blocking peptide - Protein Information

Name SLC25A24 (<u>HGNC:20662</u>)

#### Function

Electroneutral antiporter that mediates the transport of adenyl nucleotides through the inner mitochondrial membrane. Originally identified as an ATP-magnesium/inorganic phosphate antiporter, it also acts as a broad specificity adenyl nucleotide antiporter. By regulating the mitochondrial matrix adenyl nucleotide pool could adapt to changing cellular energetic demands and indirectly regulate adenyl nucleotide- dependent metabolic pathways (PubMed:<a href="http://www.uniprot.org/citations/15123600" target="\_blank">15123600</a>, PubMed:<a href="http://www.uniprot.org/citations/2015608" target="\_blank">22015608</a>). In vitro, a low activity is also observed with guanyl and pyrimidine nucleotides (PubMed:<a href="http://www.uniprot.org/citations/15123600" target="\_blank">15123600</a>). May play a role in protecting cells against oxidative stress-induced cell death, by buffering calcium levels in the mitochondrial matrix through the formation of calcium- phosphate precipitates (PubMed:<a



href="http://www.uniprot.org/citations/22015608" target="\_blank">22015608</a>, PubMed:<a href="http://www.uniprot.org/citations/29100093" target="\_blank">29100093</a>).

## **Cellular Location**

Mitochondrion inner membrane; Multi-pass membrane protein

Tissue Location

Expressed in all tissues tested. Highly expressed in testis, expressed at intermediate level in small intestine and pancreas, and weakly expressed in kidney, spleen, liver, skeletal muscle and heart.

# SLC25A24 Antibody (N-term) Blocking peptide - Protocols

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

## Blocking Peptides

# SLC25A24 Antibody (N-term) Blocking peptide - Images

# SLC25A24 Antibody (N-term) Blocking peptide - Background

Calcium-dependent mitochondrial solute carrier. Mitochondrial solute carriers shuttle metabolites, nucleotides, and cofactors through the mitochondrial inner membrane. May act as a ATP-Mg/Pi exchanger that mediates the transport of Mg-ATP in exchange for phosphate, catalyzing the net uptake or efflux of adenine nucleotides into or from the mitochondria.

## SLC25A24 Antibody (N-term) Blocking peptide - References

Rose, J. Phd, et al. Mol. Med. (2010) In press :Fiermonte, G., et al. J. Biol. Chem. 279(29):30722-30730(2004)del Arco, A., et al. J. Biol. Chem. 279(23):24701-24713(2004)