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CBAA1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP9682a

Specification

CBAA1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q9BPX6

CBAA1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 10367

Other Names
Calcium uptake protein 1, mitochondrial, Atopy-related autoantigen CALC, ara CALC, Calcium-binding atopy-related autoantigen 1, Hom s 4, MICU1, CALC, CBARA1

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.

CBAA1 Antibody (N-term) Blocking Peptide - Protein Information

Name MICU1

Synonyms CALC {ECO:0000303|PubMed:16002733}, CBAR

Function
Key regulator of mitochondrial calcium uniporter (MCU) that senses calcium level via its EF-hand domains (PubMed:20693986, PubMed:23101630, PubMed:23747253, PubMed:24313810, PubMed:24332854, PubMed:24503055, PubMed:24560927, PubMed:26341627, PubMed:26903221, PubMed:27099988). MICU1 and MICU2 form a disulfide-linked heterodimer that stimulates and inhibits MCU activity, depending on the concentration of calcium. MICU1 acts both as an activator or inhibitor of mitochondrial calcium uptake (PubMed:26903221). Acts as a

gatekeeper of MCU at low concentration of calcium, preventing channel opening (PubMed:26903221). Enhances MCU opening at high calcium concentration, allowing a rapid response of mitochondria to calcium signals generated in the cytoplasm (PubMed:24560927, PubMed:26903221). Regulates glucose- dependent insulin secretion in pancreatic beta-cells by regulating mitochondrial calcium uptake (PubMed:22904319). Induces T-helper 1- mediated autoreactivity, which is accompanied by the release of IFNG (PubMed:16002733).

Cellular Location
Mitochondrion inner membrane; Single-pass membrane protein. Mitochondrion intermembrane space

Tissue Location
Expressed in epithelial cell lines. Strongly expressed in epidermal keratinocytes and dermal endothelial cells

CBAA1 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

CBAA1 Antibody (N-term) Blocking Peptide - Images

CBAA1 Antibody (N-term) Blocking Peptide - References

Bordicchia, M., et al. Metab. Clin. Exp. (2009) In press :Grupe, A., et al. Am. J. Hum. Genet. 78(1):78-88(2006)Natter, S., et al. FASEB J. 12(14):1559-1569(1998)