

CBAA1 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9682a**Specification**

CBAA1 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	Q9BPX6
Other Accession	Q4R518
Reactivity	Human
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	54351
Antigen Region	52-81

CBAA1 Antibody (N-term) - 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

Target/Specificity

This CBAA1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 52-81 amino acids from the N-terminal region of human CBAA1.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CBAA1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CBAA1 Antibody (N-term) - 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

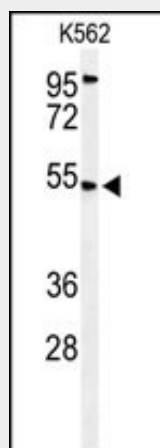
Expressed in epithelial cell lines. Strongly expressed in epidermal keratinocytes and dermal endothelial cells

CBAA1 Antibody (N-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CBAA1 Antibody (N-term) - Images



Western blot analysis of CBAA1 Antibody (N-term) (Cat. #AP9682a) in K562 cell line lysates (35ug/lane). CBAA1 (arrow) was detected using the purified Pab.

CBAA1 Antibody (N-term) - 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)