

CBARA1 (aa113-126) Antibody (internal region)
Peptide-affinity purified goat antibody
Catalog # AF3517a**Specification**

CBARA1 (aa113-126) Antibody (internal region) - Product Information

Application	WB
Primary Accession	Q9BPX6
Other Accession	NP_006068.2 , NP_001182447.1 , 10367 , 216001 (mouse) , 365567 (rat)
Reactivity	Human
Predicted	Mouse, Rat, Pig, Dog, Cow
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	54351

CBARA1 (aa113-126) Antibody (internal region) - 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

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CBARA1 (aa113-126) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

CBARA1 (aa113-126) Antibody (internal region) - 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:<a href="http://www.uniprot.org/citations/23101630"

target="_blank">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

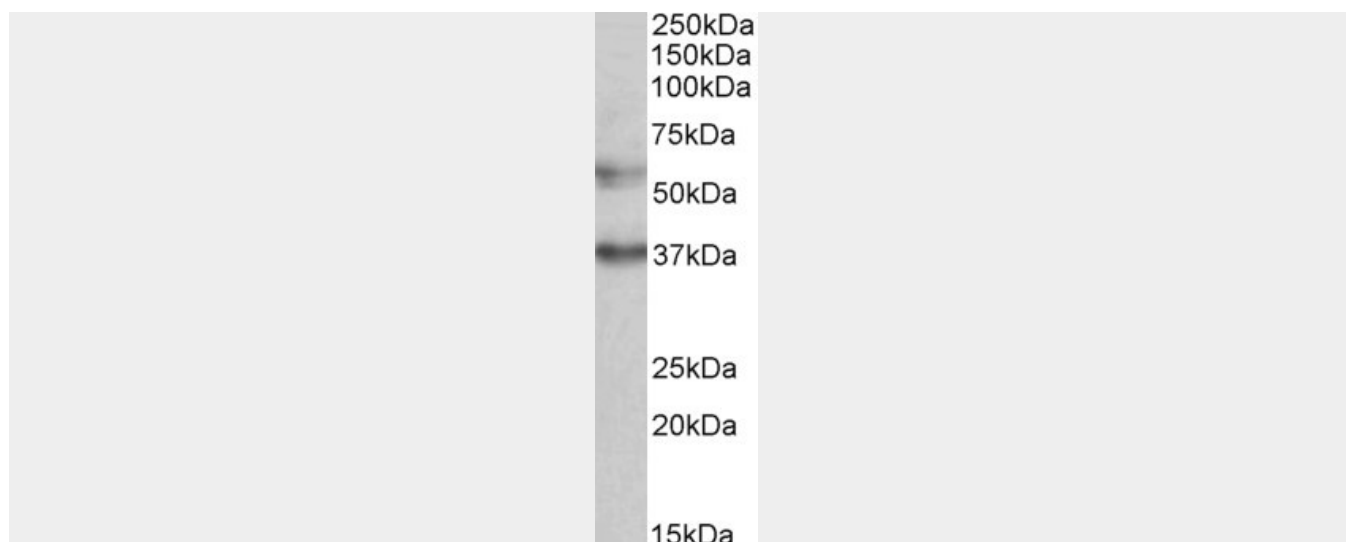
CBARA1 (aa113-126) Antibody (internal region) - Protocols

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](#)

CBARA1 (aa113-126) Antibody (internal region) - Images





AF3517a (0.5 µg/ml) staining of K562 lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

CBARA1 (aa113-126) Antibody (internal region) - Background

This antibody is expected to recognize reported isoforms 1 and 2 (NP_006068.2; NP_001182447.1).

CBARA1 (aa113-126) Antibody (internal region) - References

MICU1 encodes a mitochondrial EF hand protein required for Ca(2+) uptake. Perocchi F, Gohil VM, Girgis HS, Bao XR, McCombs JE, Palmer AE, Mootha VK, Nature 2010 Sep 4; 467 (7313): 291-6. PMID: 20693986