

MICU1 Antibody - C-terminal region
Rabbit Polyclonal Antibody
Catalog # AI15388**Specification**

MICU1 Antibody - C-terminal region - Product Information

Application	WB
Primary Accession	Q9BPX6
Other Accession	NM_001195519 , NP_001182448
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Goat, Horse, Bovine, Guinea Pig, Dog
Predicted	Human, Mouse, Rat, Rabbit, Pig, Goat, Horse, Bovine, Guinea Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	30kDa KDa

MICU1 Antibody - C-terminal region - Additional Information**Gene ID** 10367**Alias Symbol** CALC, DKFZp564C246, EFHA3, FLJ12684, CBARA1**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

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-MICU1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

MICU1 Antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

MICU1 Antibody - C-terminal 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

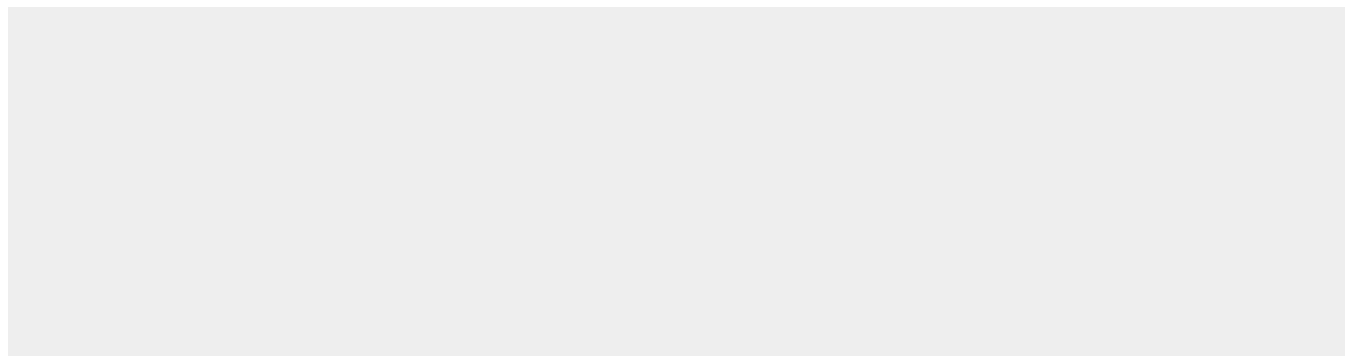
Expressed in epithelial cell lines. Strongly expressed in epidermal keratinocytes and dermal endothelial cells

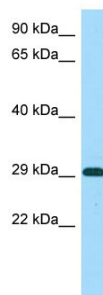
MICU1 Antibody - C-terminal region - Protocols

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](#)

MICU1 Antibody - C-terminal region - Images





WB Suggested Anti-MICU1 Antibody Titration: 1.0 μ g/ml

Positive Control: MCF7 Whole Cell MICU1 is supported by BioGPS gene expression data to be expressed in MCF7

MICU1 Antibody - C-terminal region - References

Ota T., et al. Nat. Genet. 36:40-45(2004).

Wiemann S., et al. Genome Res. 11:422-435(2001).

Deloukas P., et al. Nature 429:375-381(2004).

Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.

Natter S., et al. FASEB J. 12:1559-1569(1998).