

Datasheet for ABIN7601931  
**anti-MCU antibody (AA 51-351)**



[Go to Product page](#)

## Overview

Quantity:	100 µg
Target:	MCU
Binding Specificity:	AA 51-351
Reactivity:	Human, Mouse, Rat, Monkey
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This MCU antibody is un-conjugated
Application:	ELISA, Immunohistochemistry (IHC), Western Blotting (WB), Flow Cytometry (FACS)

## Product Details

Purpose:	Anti-MCU Antibody Picoband®
Immunogen:	E.coli-derived human MCU recombinant protein (Position: V51-D351).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-MCU Antibody Picoband® (ABIN7601931). Tested in ELISA, Flow Cytometry, IHC, WB applications. This antibody reacts with Human, Monkey, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

## Target Details

Target:	MCU
Alternative Name:	MCU ( <a href="#">MCU Products</a> )
Background:	<p>Synonyms: Serine/threonine-protein kinase/endoribonuclease IRE1, Endoplasmic reticulum-to-nucleus signaling 1, Inositol-requiring protein 1, hIRE1p, Ire1-alpha, IRE1a, Serine/threonine-protein kinase, Endoribonuclease, ERN1</p> <p>Tissue Specificity: Ubiquitously expressed. High levels observed in pancreatic tissue.</p> <p>Background: The mitochondrial calcium uniporter (MCU) is a transmembrane protein that allows the passage of calcium ions from a cell's cytosol into mitochondria. Its activity is regulated by MICU1 and MICU2, which together with the MCU make up the mitochondrial calcium uniporter complex. This gene encodes a calcium transporter that localizes to the mitochondrial inner membrane. The encoded protein interacts with mitochondrial calcium uptake 1. Alternative splicing results in multiple transcript variants.</p>
Molecular Weight:	34 kDa
Gene ID:	90550
Pathways:	<a href="#">Positive Regulation of Peptide Hormone Secretion</a> , <a href="#">Carbohydrate Homeostasis</a>

## Application Details

Application Notes:	<p>Western blot, 0.25-0.5 µg/mL, Human, Mouse, Rat, Monkey</p> <p>Immunohistochemistry (Paraffin-embedded Section), 2-5 µg/mL, Human, Mouse, Rat</p> <p>Flow Cytometry (Fixed), 1-3 µg/1x10<sup>6</sup> cells, Human</p> <p>ELISA, 0.1-0.5 µg/mL, -</p> <p>1. Baughman, J. M., Perocchi, F., Girgis, H. S., Plovanich, M., Belcher-Timme, C. A., Sancak, Y., Bao, X. R., Strittmatter, L., Goldberger, O., Bagorad, R. L., Koteliansky, V., Mootha, V. K. Integrative genomics identifies MCU as an essential component of the mitochondrial calcium uniporter. Nature 476: 341-345, 2011. 2. De Stefani, D., Raffaello, A., Teardo, E., Szabo, I., Rizzuto, R. A forty-kilodalton protein of the inner membrane is the mitochondrial calcium uniporter. Nature 476: 336-340, 2011. 3. Hartz, P. A. Personal Communication. Baltimore, Md. 8/31/2011.</p>
Restrictions:	For Research Use only

## Handling

Format:	Lyophilized
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## Handling

Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> , 0.01 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.