

#13706 Store at -20°C

## MCUR1 Antibody



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3 Trask Lane | Danvers | Massachusetts | 01923 | USA

**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB, IP	H M R Mk	Endogenous	23	Rabbit	#Q96AQ8	63933

<b>Product Usage Information</b>	<b>Application</b> Western Blotting Immunoprecipitation	<b>Dilution</b> 1:1000 1:50
<b>Storage</b>	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.	
<b>Specificity / Sensitivity</b>	MCUR1 Antibody recognizes endogenous levels of total MCUR1 protein.	
<b>Source / Purification</b>	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala305 of human MCUR1 protein. Antibodies are purified by protein A and peptide affinity chromatography.	
<b>Background</b>	Mitochondrial Calcium Uniporter Regulator 1 (MCUR1) is a mitochondrial inner membrane protein involved in the uptake of calcium. This multi-pass protein contains two transmembrane domains with both amino- and carboxy-termini projecting into the same mitochondrial intermembrane space (1). Research studies indicate that reduction in MCUR1 activity results in decreased mitochondrial Ca <sup>2+</sup> uptake, while overexpression of MCUR1 results in increased mitochondrial calcium levels (1). MCUR1 protein directly interacts with mitochondrial calcium uniporter (MCU) and plays an essential role in the regulation of calcium uptake and maintenance of mitochondrial calcium homeostasis (1). Regulation of MCU by MCUR1 may be critical for a variety of cellular functions, including signal transduction, bioenergetics, and cell death and survival (2).	
<b>Background References</b>	1. Marchi, S. and Pinton, P. (2014) <i>J Physiol</i> 592, 829-39. 2. Mallilankaraman, K. et al. (2012) <i>Nat Cell Biol</i> 14, 1336-43.	

<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
<b>Western Blot Buffer</b>	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
<b>Applications Key</b>	<b>WB:</b> Western Blotting <b>IP:</b> Immunoprecipitation
<b>Cross-Reactivity Key</b>	<b>H:</b> human <b>M:</b> mouse <b>R:</b> rat <b>Hm:</b> hamster <b>Mk:</b> monkey <b>Vir:</b> virus <b>Mi:</b> mink <b>C:</b> chicken <b>Dm:</b> D. melanogaster <b>X:</b> Xenopus <b>Z:</b> zebrafish <b>B:</b> bovine <b>Dg:</b> dog <b>Pg:</b> pig <b>Sc:</b> S. cerevisiae <b>Ce:</b> C. elegans <b>Hr:</b> horse <b>GP:</b> Guinea Pig <b>Rab:</b> rabbit <b>All:</b> all species expected
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