

#12524 Store at -20°C

CBARA1/MICU1 (D4P8Q) Rabbit mAb



✓ 100 µl
(10 western blots)

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New 03/13

For Research Use Only. Not For Use In Diagnostic Procedures.

Entrez-Gene ID #10367
Swiss-Prot Acc. #Q9BPX6

Applications W Endogenous	Species Cross-Reactivity* H, M, R, Mk	Molecular Wt. 47 kDa	Isotype Rabbit IgG**
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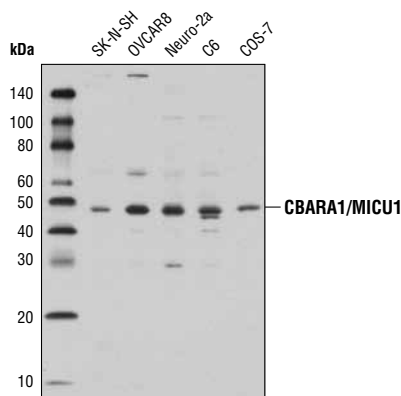
Background: CBARA1/MICU1 is a mitochondrial protein associated to the mitochondrial inner membrane that is comprised of two EF hand helix-loop-helix motifs. CBARA1/MICU1 is involved in mitochondrial calcium entry, metabolic coupling between cytosolic calcium transients, and activation of matrix dehydrogenases (1). Mitochondrial CBARA1/MICU1 is required to preserve normal mitochondrial calcium concentration below the equilibrium level by interacting with the uniporter pore-forming subunit MCU (2). CBARA1/MICU1 is important in pancreatic β -cell mitochondrial calcium uptake and sustained insulin secretion (3).

Specificity/Sensitivity: CBARA1/MICU1 (D4P8Q) Rabbit mAb recognizes endogenous levels of total CBARA1/MICU1 protein.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Lys110 of human CBARA1/MICU1 protein.

Background References:

- (1) Perocchi, F. et al. (2010) *Nature* 467, 291-6.
- (2) Mallilankaraman, K. et al. (2012) *Cell* 151, 630-44.
- (3) Alam, M.R. et al. (2012) *J Biol Chem* 287, 34445-54.



Western blot analysis of extracts from various cell lines using CBARA1/MICU1 (D4P8Q) Rabbit mAb.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting 1:1000

For product specific protocols please see the web page for this product at www.cellsignaling.com.

Please visit www.cellsignaling.com for a complete listing of recommended complementary products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.