

Calregulin (H-170): sc-11398

BACKGROUND

Calnexin and Calregulin (also called Calreticulin) are calcium-binding proteins that are localized to the endoplasmic reticulum, Calnexin to the membrane and Calregulin to the lumen. Calnexin is a type I membrane protein that interacts with newly synthesized glycoproteins in the endoplasmic reticulum. It may play a role in assisting with protein assembly and in retaining unassembled protein subunits in the endoplasmic reticulum. Calregulin has both low- and high-affinity calcium-binding sites. Neither Calnexin nor Calregulin contains the calcium-binding "E-F hand" motif found in calmodulins. Calnexin and Calregulin are important for the maturation of glycoproteins in the endoplasmic reticulum and appear to bind many of the same proteins.

CHROMOSOMAL LOCATION

Genetic locus: CALR (human) mapping to 19p13.2; Calr (mouse) mapping to 8 C3.

SOURCE

Calregulin (H-170) is a rabbit polyclonal antibody raised against amino acids 248-417 of Calregulin of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Calregulin (H-170) is recommended for detection of Calregulin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Calregulin siRNA (h): sc-29234, Calregulin siRNA (m): sc-29895, Calregulin siRNA (r): sc-63293, Calregulin shRNA Plasmid (h): sc-29234-SH, Calregulin shRNA Plasmid (m): sc-29895-SH, Calregulin shRNA Plasmid (r): sc-63293-SH, Calregulin shRNA (h) Lentiviral Particles: sc-29234-V, Calregulin shRNA (m) Lentiviral Particles: sc-29895-V and Calregulin shRNA (r) Lentiviral Particles: sc-63293-V.

Molecular Weight of Calregulin: 55 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, SK-MEL-28 cell lysate: sc-2236 or NIH/3T3 whole cell lysate: sc-2210.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

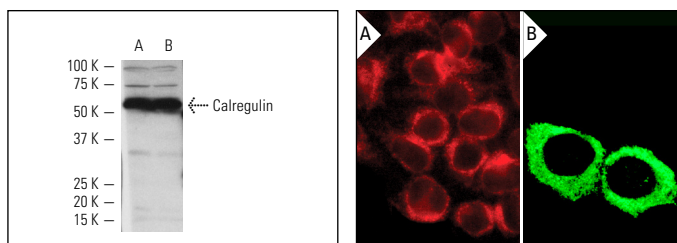
PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



Calregulin (H-170): sc-11398. Western blot analysis of Calregulin expression in HeLa (A) and SK-MEL-28 (B) whole cell lysates.

Calregulin (H-170): sc-11398. Immunofluorescence staining of methanol-fixed HeLa cells (A) and NIH/3T3 cells (B) showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

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- Viiri, K.M., et al. 2009. DNA-binding and -bending activities of SAP30L and SAP30 are mediated by a zinc-dependent module and monophosphoinositides. *Mol. Cell. Biol.* 29: 342-356.
- Fox, C.P., et al. 2010. A novel latent membrane 2 transcript expressed in Epstein-Barr virus-positive NK- and T-cell lymphoproliferative disease encodes a target for cellular immunotherapy. *Blood* 116: 3695-3704.
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- Zhang, J., et al. 2011. Isoforms of p38MAPK γ and δ contribute to differentiation of human AML cells induced by 1,25-dihydroxyvitamin D₃. *Exp. Cell Res.* 317: 117-130.
- Hebert-Chatelain, E., et al. 2012. Preservation of NADH ubiquinone-oxidoreductase activity by Src kinase-mediated phosphorylation of NDUFB10. *Biochim. Biophys. Acta* 1817: 718-725.
- Bénard, G., et al. 2012. Mitochondrial CB₁ receptors regulate neuronal energy metabolism. *Nat. Neurosci.* 15: 558-564.



Try **Calregulin (F-4): sc-373863** or **Calregulin (H-10): sc-166839**, our highly recommended monoclonal alternatives to Calregulin (H-170). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Calregulin (F-4): sc-373863**.