Calregulin (A-9): sc-166837

**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 (A-9) is a mouse monoclonal antibody raised against amino acids 248-417 of Calregulin of human origin.

**PRODUCT**

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

Calregulin (A-9) is available conjugated to agarose (sc-166837 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166837 HRP), 200 µg/ml, for WB, IHC/IP and ELISA; to either phycoerythrin (sc-166837 PE), fluorescein (sc-166837 FITC), Alexa Fluor® 488 (sc-166837 AF488), Alexa Fluor® 546 (sc-166837 AF546), Alexa Fluor® 594 (sc-166837 AF594) or Alexa Fluor® 647 (sc-166837 AF647), 200 µg/ml, for WB (RGB), IF and IHC; and to either Alexa Fluor® 680 (sc-166837 AF680) or Alexa Fluor® 790 (sc-166837 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

Calregulin (A-9) is recommended for detection of Calregulin of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of Calregulin: 55 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, HL-60 whole cell lysate: sc-2209 or A-431 whole cell lysate: sc-2201.

**STORAGE**

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

**DATA**

Calregulin (A-9) Alexa Fluor® 488: sc-166837 AF488.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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