# SANTA CRUZ BIOTECHNOLOGY, INC.

# Calnexin (C-20): sc-6465



# 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: CANX (human) mapping to 5q35.3; Canx (mouse) mapping to 11 B1.3.

## SOURCE

Calnexin (C-20) is available as either goat (sc-6465) or rabbit (sc-6465-R) polyclonal affinity purified antibody raised against a peptide mapping at the C-terminus of Calnexin of human origin.

# PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6465 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

Calnexin (C-20) is recommended for detection of Calnexin 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)), 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).

Calnexin (C-20) is also recommended for detection of Calnexin in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Calnexin siRNA (h): sc-29233, Calnexin siRNA (m): sc-29884, Calnexin shRNA Plasmid (h): sc-29233-SH, Calnexin shRNA Plasmid (m): sc-29884-SH, Calnexin shRNA (h) Lentiviral Particles: sc-29233-V and Calnexin shRNA (m) Lentiviral Particles: sc-29884-V.

Molecular Weight of Calnexin: 90 kDa.

Positive Controls: Calnexin (m): 293T Lysate: sc-125090, NIH/3T3 whole cell lysate: sc-2210 or HeLa whole cell lysate: sc-2200.

# STORAGE

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

### **RESEARCH USE**

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

#### DATA





Calnexin (C-20)-R: sc-6465-R. Western blot analysis of Calnexin expression in non-transfected: sc-117752 (**A**) and mouse Calnexin transfected: sc-125090 (**B**) 293T whole cell lysates. Calnexin (C-20): sc-6465. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic staining (**A**). Immunoperox-idase staining of formalin fixed, paraffin-embedded human duodenum tissue showing cytoplasmic staining of glandular cells (**B**).

### SELECT PRODUCT CITATIONS

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