SANTA CRUZ BIOTECHNOLOGY, INC.

CALCOCO2 (C-12): sc-160994

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

CALCOCO2 (calcium-binding and coiled-coil domain-containing protein 2), also known as NDP52 (nuclear dot protein 52), is a 446 amino acid protein that localizes to the perinuclear region of the cytoplasm and to nuclear dots, where it functions as a subunit of nuclear domain 10 (ND10) bodies. ND10 bodies are nuclear domains that are thought to be associated with the nuclear matrix and may have a role in the life cycles of various viruses, such as HSV-1. Expressed ubiquitously with highest expression in skeletal muscle, CALCOCO2 exists as a complex with proteins such as Myosin VI and is involved in Actin cytoskeleton organization and in ruffle formation. CALCOCO2 may also regulate cell adhesion, cytokine signaling and constitutive secretion within the cell, suggesting an important role in membrane trafficking pathways and developmental events.

REFERENCES

1. Korioth, F., Gieffers, C., Maul, G.G. and Frey, J. 1995. Molecular characterization of NDP52, a novel protein of the nuclear domain 10, which is redistributed upon virus infection and interferon treatment. J. Cell Biol. 130: 1-13.
2. Korioth, F., et al. 1996. The nuclear domain 10 (ND10) is disrupted by the human cytomegalovirus gene product IE1. Exp. Cell Res. 229: 155-158.

CHROMOSOMAL LOCATION

Genetic locus: CALCOCO2 (human) mapping to 17q21.32.

SOURCE

CALCOCO2 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CALCOCO2 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.

Blocking peptide available for competition studies, sc-160994 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CALCOCO2 (C-12) is recommended for detection of CALCOCO2 of 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); non cross-reactive with CALCOCO1.

CALCOCO2 (C-12) is also recommended for detection of CALCOCO2 in additional species, including canine and porcine.

Suitable for use as control antibody for CALCOCO2 siRNA (h): sc-93738, CALCOCO2 shRNA Plasmid (h): sc-93738-SH and CALCOCO2 shRNA (h) Lentiviral Particles: sc-93738-V.

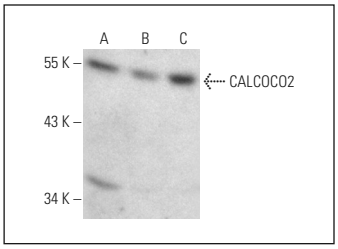
Molecular Weight of CALCOCO2: 55 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat nuclear extract: sc-2132 or Ramos nuclear extract: sc-2153

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CALCOCO2 (C-12): sc-160994. Western blot analysis of CALCOCO2 expression in HeLa whole cell lysates (**A**) and Jurkat (**B**) and Ramos (**C**) nuclear extracts.

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.

PROTOCOLS

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