

CALCOCO2 (h): 293 Lysate: sc-112224

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

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- Sternsdorf, T., et al. 1997. Cellular localization, expression, and structure of the nuclear dot protein 52. *J. Cell Biol.* 138: 435-448.
- Florin, L., et al. 2002. Reorganization of nuclear domain 10 induced by papillomavirus capsid protein I2. *Virology* 295: 97-107.
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- Di, Y., et al. 2003. HCC-associated protein HCAP1, a variant of Gemin4, interacts with zinc-finger proteins. *J. Biochem.* 133: 713-718.
- Everett, R.D., et al. 2004. Formation of nuclear foci of the herpes simplex virus type 1 regulatory protein ICP4 at early times of infection: localization, dynamics, recruitment of ICP27, and evidence for the *de novo* induction of ND10-like complexes. *J. Virol.* 78: 1903-1917.

CHROMOSOMAL LOCATION

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

PRODUCT

CALCOCO2 (h): 293T Lysate represents a lysate of human CALCOCO2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

CALCOCO2 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive CALCOCO2 antibodies. Recommended use: 10-20 µl per lane.

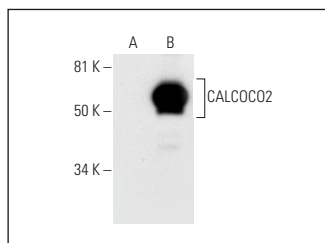
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

CALCOCO2 (C-9): sc-393063 is recommended as a positive control antibody for Western Blot analysis of enhanced human CALCOCO2 expression in CALCOCO2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

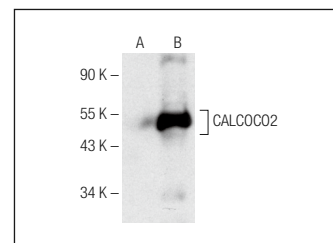
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



CALCOCO2 (C-9): sc-393063. Western blot analysis of CALCOCO2 expression in non-transfected: sc-110760 (A) and human CALCOCO2 transfected: sc-112224 (B) 293 whole cell lysates.



CALCOCO2 (F-6): sc-376540. Western blot analysis of CALCOCO2 expression in non-transfected: sc-110760 (A) and human CALCOCO2 transfected: sc-112224 (B) 293 whole cell lysates.

RESEARCH USE

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