

CKIP-1 (D-20): sc-50225

BACKGROUND

Casein kinase II-interacting protein 1 (CKIP-1), also designated Pleckstrin homology domain containing family O member 1 (PLEKH01), is a 409 amino acid protein with an N-terminal Pleckstrin homology domain and a putative C-terminal Jun leucine zipper interactive domain. CKIP-1 is expressed at the highest levels in skeletal muscle and heart, intermediately in placenta, lung and brain and at the weakest levels in pancreas, liver and kidney. CKIP-1 localizes to the plasma membrane of transfected COS-7 cells and also to the plasma membrane and the nucleus in human osteosarcoma cells. It interacts with the N-terminus of CSNK2A1 and with full length CSNK2A1, but not with CSNK2A2 or CSNK2B.

REFERENCES

1. Bosc, D.G., et al. 2000. Identification and characterization of CKIP-1, a novel Pleckstrin homology domain-containing protein that interacts with protein kinase CK2. *J. Biol. Chem.* 275: 14295-14306.
2. Olsten, M.E., et al. 2004. The Pleckstrin homology domain of CK2 interacting protein-1 is required for interactions and recruitment of protein kinase CK2 to the plasma membrane. *J. Biol. Chem.* 279: 42114-42127.
3. Barrios-Rodiles, M., et al. 2005. High-throughput mapping of a dynamic signaling network in mammalian cells. *Science* 307: 1621-1625.
4. Zhang, L., et al. 2005. Role for the Pleckstrin homology domain-containing protein CKIP-1 in AP-1 regulation and apoptosis. *EMBO J.* 24: 766-778.

CHROMOSOMAL LOCATION

Genetic locus: PLEKH01 (human) mapping to 1q21.2; Plekho1 (mouse) mapping to 3 F2.1.

SOURCE

CKIP-1 (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CKIP-1 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-50225 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

CKIP-1 (D-20) is recommended for detection of CKIP-1 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).

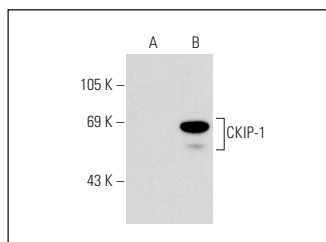
CKIP-1 (D-20) is also recommended for detection of CKIP-1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CKIP-1 siRNA (h): sc-60389, CKIP-1 siRNA (m): sc-60390, CKIP-1 shRNA Plasmid (h): sc-60389-SH, CKIP-1 shRNA Plasmid (m): sc-60390-SH, CKIP-1 shRNA (h) Lentiviral Particles: sc-60389-V and CKIP-1 shRNA (m) Lentiviral Particles: sc-60390-V.

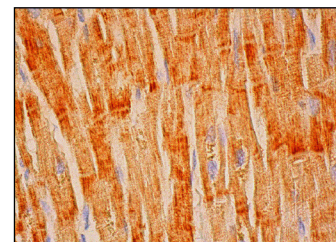
Molecular Weight of CKIP-1: 50 kDa.

Positive Controls: CKIP-1 (h4): 293T Lysate: sc-176668.

DATA



CKIP-1 (D-20): sc-50225. Western blot analysis of CKIP-1 expression in non-transfected: sc-117752 (A) and human CKIP-1 transfected: sc-176668 (B) 293T whole cell lysates.



CKIP-1 (D-20): sc-50225. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes.

SELECT PRODUCT CITATIONS

1. Xi, S., et al. 2010. N-terminal PH domain and C-terminal auto-inhibitory region of CKIP-1 coordinate to determine its nucleus-plasma membrane shuttling. *FEBS Lett.* 584: 1223-1230.
2. Zhang, L., et al. 2013. Integrated analysis of genomics and proteomics reveals that CKIP-1 is a novel macrophage migration regulator. *Biochem. Biophys. Res. Commun.* 436: 382-327.



Try **CKIP-1 (A-12): sc-376355** or **CKIP-1 (A-3): sc-376060**, our highly recommended monoclonal alternatives to CKIP-1 (D-20).