

CLCP1 (I-16): sc-74362

BACKGROUND

CLCP1 (CUB, LCCL and coagulation factor V/VIII-homology domains protein 1), also known as DCBLD2 (discoidin, CUB and LCCL domain containing 2) or ESDN, is a 775 amino acid single-pass type I membrane protein that contains one CUB domain, one LCCL domain and one F5/8 type C domain. Expressed at high levels in heart, testis and skeletal muscle, CLCP1 is thought to regulate vascular smooth muscle cell (VSMC) proliferation and remodeling and may be involved in the transformation and metastasis of various cancers, such as metastatic lung cancer and gastric carcinoma. Two isoforms of CLCP1 exist due to alternative splicing events. The gene encoding CLCP1 maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci.

REFERENCES

1. Kobuke, K., et al. 2001. ESDN, a novel neuropilin-like membrane protein cloned from vascular cells with the longest secretory signal sequence among eukaryotes, is up-regulated after vascular injury. *J. Biol. Chem.* 276: 34105-34114.
2. Koshikawa, K., et al. 2002. Significant upregulation of a novel gene, CLCP1, in a highly metastatic lung cancer subline as well as in lung cancers *in vivo*. *Oncogene* 21: 2822-2828.
3. Zhang, Y., et al. 2005. Time-resolved mass spectrometry of tyrosine phosphorylation sites in the epidermal growth factor receptor signaling network reveals dynamic modules. *Mol. Cell. Proteomics* 4: 1240-1250.
4. Sadeghi, M.M., et al. 2007. ESDN is a marker of vascular remodeling and regulator of cell proliferation in graft arteriosclerosis. *Am. J. Transplant.* 7: 2098-2105.
5. Chen, Y., et al. 2007. Phosphoproteomics identified Endofin, DCBLD2, and KIAA0582 as novel tyrosine phosphorylation targets of EGF signaling and Iressa in human cancer cells. *Proteomics* 7: 2384-2397.
6. Hofsl, E., et al. 2008. Identification of novel neuroendocrine-specific tumour genes. *Br. J. Cancer* 99: 1330-1339.
7. Kim, M., et al. 2008. Epigenetic downregulation and suppressive role of DCBLD2 in gastric cancer cell proliferation and invasion. *Mol. Cancer Res.* 6: 222-230.

CHROMOSOMAL LOCATION

Genetic locus: DCBLD2 (human) mapping to 3q12.1; Dcbld2 (mouse) mapping to 16 C1.2.

SOURCE

CLCP1 (I-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of CLCP1 of human origin.

STORAGE

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

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-74362 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CLCP1 (I-16) is recommended for detection of CLCP1 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CLCP1 (I-16) is also recommended for detection of CLCP1 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for CLCP1 siRNA (h): sc-72919, CLCP1 siRNA (m): sc-72920, CLCP1 shRNA Plasmid (h): sc-72919-SH, CLCP1 shRNA Plasmid (m): sc-72920-SH, CLCP1 shRNA (h) Lentiviral Particles: sc-72919-V and CLCP1 shRNA (m) Lentiviral Particles: sc-72920-V.

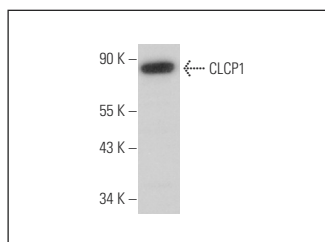
Molecular Weight of CLCP1: 80 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

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



CLCP1 (I-16): sc-74362. Western blot analysis of CLCP1 expression in HeLa whole cell lysate.

RESEARCH USE

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