

CDCP1 (E-20): sc-32844

BACKGROUND

CDCP1 (CUB-domain-containing protein 1) contains three extracellular CUB domains, a transmembrane domain, and two putative cytoplasmic tyrosine phosphorylation sites. Phosphorylation of the gp140 and p80 proteins is mediated by Src family kinases at various tyrosine residues, including Tyr 734. PTP family members mediate the desphosphorylation of CDCP1. The conversion of gp140 to p80 prolongs the phosphorylation state, which may affect signaling in epithelial wounds. CDCP1 acts as a marker for hematopoietic cells and also exhibits high expression in metastatic colon and breast tumors.

REFERENCES

1. Scherl-Mostageer, M., et al. 2001. Identification of a novel gene, CDCP1, overexpressed in human colorectal cancer. *Oncogene* 20: 4402-4408.
2. Conze, T., et al. 2003. CDCP1 is a novel marker for hematopoietic stem cells. *Ann. N.Y. Acad. Sci.* 996: 222-226.
3. Hooper, J.D., et al. 2003. Subtractive immunization using highly metastatic human tumor cells identifies SIMA135/CDCP1, a 135 kDa cell-surface phosphorylated glycoprotein antigen. *Oncogene* 22: 1783-1794.
4. Brown, T.A., et al. 2004. Adhesion or plasmin regulates tyrosine phosphorylation of a novel membrane glycoprotein p80/gp140/CUB domain-containing protein 1 in epithelia. *J. Biol. Chem.* 279: 14772-14783.
5. Buhning, H.J., et al. 2004. CDCP1 identifies a broad spectrum of normal and malignant stem/progenitor cell subsets of hematopoietic and non-hematopoietic origin. *Stem Cells* 22: 334-343.
6. Benes, C.H., et al. 2005. The C2 domain of PKC δ is a phosphotyrosine binding domain. *Cell* 121: 271-280.

CHROMOSOMAL LOCATION

Genetic locus: CDCP1 (human) mapping to 3p21.31; Cdcp1 (mouse) mapping to 9 F4.

SOURCE

CDCP1 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of CDCP1 isoform 1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-32844 P, (100 μ g 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.

APPLICATIONS

CDCP1 (E-20) is recommended for detection of CDCP1 isoforms 1 and 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

CDCP1 (E-20) is also recommended for detection of CDCP1 isoforms 1 and 2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CDCP1 siRNA (h): sc-44640, CDCP1 siRNA (m): sc-44641, CDCP1 shRNA Plasmid (h): sc-44640-SH, CDCP1 shRNA Plasmid (m): sc-44641-SH, CDCP1 shRNA (h) Lentiviral Particles: sc-44640-V and CDCP1 shRNA (m) Lentiviral Particles: sc-44641-V.

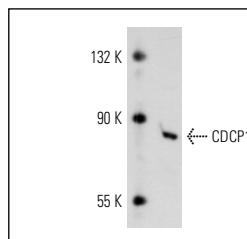
Molecular Weight of CDCP1: 140/80 kDa.

Positive Controls: A549 cell lysate: sc-2413.

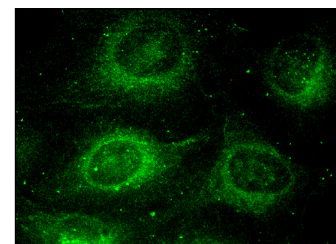
RECOMMENDED SECONDARY REAGENTS

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



CDCP1 (E-20): sc-32844. Western blot analysis of CDCP1 expression in A549 whole cell lysate.



CDCP1 (E-20): sc-32844. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane and cytoplasmic localization.

PROTOCOLS

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



Try **CDCP1 (D-1): sc-515545**, our highly recommended monoclonal alternative to CDCP1 (E-20).