

CDCP1 (T-17): sc-32846

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.* 996222-996226.
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.

SOURCE

CDCP1 (T-17) 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-32846 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 (T-17) is recommended for detection of CDCP1 isoform 1 of 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); non cross-reactive with with CDCP1 isoform 2.

CDCP1 (T-17) is also recommended for detection of CDCP1 isoform 1 in additional species, including canine, bovine and porcine.

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

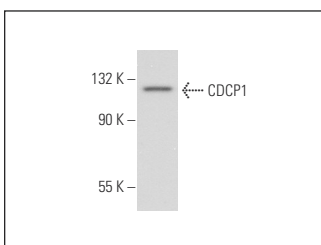
Molecular Weight of CDCP1: 140/80 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201.

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 (T-17): sc-32846. Western blot analysis of CDCP1 expression in A-431 whole cell lysate.

PROTOCOLS

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Try **CDCP1 (D-1): sc-515545**, our highly recommended monoclonal alternative to CDCP1 (T-17).