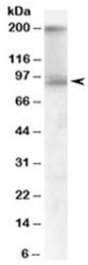
CDCP1 Antibody Goat Polyclonal (R35059)

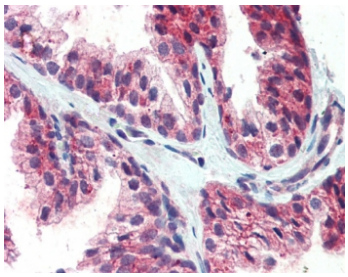
Catalog No.	Formulation	Size
R35059-100UG	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	64866
Localization	Cytoplasmic, membranous
Applications	Western blot: 1-3ug/ml IHC (FFPE): 5ug/ml ELISA (peptide) LOD: 1:32000
Limitations	This CDCP1 antibody is available for research use only.



Western blot testing of human colon lysate with CDCP1 Antibody Goat Polyclonal at 1ug/ml. Expected molecular weight: 93 kDa (unmodified), 130-140 kDa (glycosylated), ~70 kDa (cleaved). Both observed bands are blocked by addition of immunizing peptide.



CDCP1 Antibody Goat Polyclonal immunohistochemistry analysis of human prostate tissue. Formalin-fixed paraffin-embedded human prostate stained with CDCP1 Antibody Goat Polyclonal at 5 ug/ml. Red chromogenic staining highlights membranous and cytoplasmic signal in glandular epithelial cells, consistent with the expected cell surface localization of CDCP1 / CD318. Required HIER: steamed antigen retrieval with pH6 citrate buffer; AP-staining.

Description

CUB domain containing protein 1 (CDCP1) is a transmembrane glycoprotein encoded by the CDCP1 gene and expressed on the surface of epithelial cells and many tumor cell types. CDCP1 belongs to a family of membrane proteins containing extracellular CUB domains that participate in protein-protein interactions and cellular signaling. The CDCP1 Antibody Goat Polyclonal targets this cell surface protein and supports research investigating mechanisms of epithelial cell signaling, tumor invasion, and metastatic progression.

CDCP1 is also widely known by the alternative names CD318 and SIMA135. These designations originate from early studies that identified the protein as a 135 kDa membrane glycoprotein associated with metastatic tumor cells. As a result, CDCP1 antibody, CD318 antibody, and SIMA135 antibody are commonly used interchangeably in the scientific literature. CDCP1 antibodies are frequently applied in studies examining cell adhesion pathways, extracellular matrix interactions, and signaling mechanisms that regulate epithelial cell behavior.

The CDCP1 protein contains three extracellular CUB domains that are thought to mediate interactions with extracellular partners and contribute to regulation of cell adhesion. The intracellular cytoplasmic region contains multiple tyrosine residues that can be phosphorylated by Src family kinases. Phosphorylation of these residues promotes recruitment of signaling proteins involved in cytoskeletal remodeling, cell motility, and survival pathways. Through these signaling events, CDCP1 participates in processes that control cell detachment and migration.

Expression of CDCP1 is generally low in most normal adult tissues but can be detected in epithelial compartments that undergo active remodeling. Increased expression of CDCP1 has been reported in several cancers including lung, colorectal, breast, pancreatic, and ovarian tumors. Elevated CDCP1 levels have been associated with tumor cell invasion, metastatic dissemination, and resistance to apoptosis in experimental models. These observations have made CDCP1 an important target of investigation in cancer biology.

Goat polyclonal antibodies recognize multiple epitopes on the target protein, providing broad antigen recognition across different experimental conditions. A goat polyclonal CDCP1 antibody can therefore provide robust detection of CDCP1 protein in a variety of sample types. CDCP1 Antibody Goat Polyclonal supports studies focused on membrane signaling pathways, epithelial cell adhesion, and the molecular mechanisms that regulate tumor progression and metastasis.

Application Notes

Optimal dilution of the CDCP1 antibody should be determined by the researcher.

1. This CDCP1 antibody is specific for isoform 1.
2. Reported to IHC stain human endometrium.
3. Reported to have IP'd CDCP1 protein from A549 cells.

Immunogen

Amino acids PLLNTQEPMEPAE were used as the immunogen for this goat polyclonal CDCP1 antibody.

Storage

Aliquot and store the CDCP1 antibody at -20oC.

Alternate Names

CD318 antibody, SIMA135 antibody, CUB domain containing protein 1 antibody, CDCP1 glycoprotein antibody

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