SANTA CRUZ BIOTECHNOLOGY, INC.

CD9P-1 (T-15): sc-161467

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The Power to Question

BACKGROUND

CD9P-1 (CD9 partner 1), also known as PTGFRN (prostaglandin F2 receptor negative regulator) and Glu-Trp-Ile EWI motif-containing protein F, is a 879 amino acid endoplasmic reticular membrane protein that inhibits the binding of prostaglandin F2-α to its specific FP receptor. By this mechanism, CD9P-1 regulates prostaglandin sensitivity by decreasing the receptor number rather than the affinity constant, a form of non-competitive inhibition. CD9P-1 specifically associates with CD9, CD81, CD63, CD82 and CD151, but not with other integrins or tetraspanins. Though normally expressed primarily in keratinocytes, CD9P-1 expression is substantially increased in a number of cancer cell lines, suggesting that it is upregulated during tumorigenesis.

REFERENCES

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3. Charrin, S., et al. 2001. The major CD9 and CD81 molecular partner. Identification and characterization of the complexes. J. Biol. Chem. 276: 14329-14337.
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6. Andre, M., et al. 2007. Glycosylation status of the membrane protein CD9P-1. Proteomics 7: 3880-3895.
7. André, M., et al. 2009. *In situ* chemical cross-linking on living cells reveals CD9P-1 *cis*-oligomer at cell surface. J. Proteomics 73: 93-102.
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CHROMOSOMAL LOCATION

Genetic locus: PTGFRN (human) mapping to 1p13.1; Ptgfrn (mouse) mapping to 3 F2.2.

SOURCE

CD9P-1 (T-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of CD9P-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-161467 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CD9P-1 (T-15) is recommended for detection of CD9P-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).

CD9P-1 (T-15) is also recommended for detection of CD9P-1 in additional species, including equine, canine, bovine and porcine.

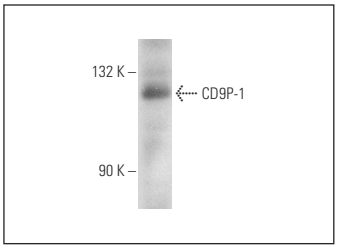
Suitable for use as control antibody for CD9P-1 siRNA (h): sc-78979, CD9P-1 siRNA (m): sc-142204, CD9P-1 shRNA Plasmid (h): sc-78979-SH, CD9P-1 shRNA Plasmid (m): sc-142204-SH, CD9P-1 shRNA (h) Lentiviral Particles: sc-78979-V and CD9P-1 shRNA (m) Lentiviral Particles: sc-142204-V.

Molecular Weight (predicted) of CD9P-1: 99 kDa.

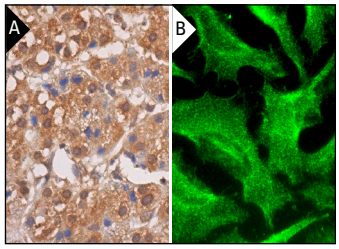
Molecular Weight (observed) of CD9P-1: 119 kDa.

Positive Controls: HEK293 whole cell lysate: sc-45136.

DATA



CD9P-1 (T-15): sc-161467. Western blot analysis of CD9P-1 expression in HEK293 whole cell lysate.



CD9P-1 (T-15): sc-161467. Immunoperoxidase staining of formalin fixed, paraffin-embedded human adrenal gland tissue showing cytoplasmic staining of glandular cells (**A**). Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (**B**).

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.