SANTA CRUZ BIOTECHNOLOGY, INC.

Vitronectin 65/75 (H-270): sc-15332



BACKGROUND

Fibronectin and Vitronectin are extracellular matrix glycoproteins that are present on most cell surfaces, in extracellular fluids, and in plasma. Both Fibronectin and Vitronectin have been shown to be involved in various functions including cell adhesion, cell motility and wound healing. Vitronectin contains an RGD (Arg-Gly-Asp acid) sequence that is present in many cell adhesion ligands. The RGD sequence has been shown to be essential for cell adhesion. Increased expression of Vitronectin, integrins and plasminogen activators has been observed in migrating cells during wound healing. Vitronectin has been shown to enhance smooth cell migration, and PAI-1 has been shown to bind to Vitronectin with high affinity, resulting in the blocking of smooth cell migration. Glycosaminoglycans, proteins involved in the anchoring of Vitronectin to the extracellular matrix, have been shown to stimulate the cleavage of Vitronectin by plasmin. This cleavage reduces the affinity of Vitronectin for PAI-1.

CHROMOSOMAL LOCATION

Genetic locus: VTN (human) mapping to 17q11.2; Vtn (mouse) mapping to 11 B5.

SOURCE

Vitronectin 65/75 (H-270) is a rabbit polyclonal antibody raised against amino acids 1-270 mapping at the N-terminus of Vitronectin 75 of human origin.

PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Vitronectin 65/75 (H-270) is recommended for detection of Vitronectin 65 and 75 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).

Suitable for use as control antibody for Vitronectin siRNA (h): sc-36820, Vitronectin siRNA (m): sc-36821, Vitronectin siRNA (r): sc-270256, Vitronectin shRNA Plasmid (h): sc-36820-SH, Vitronectin shRNA Plasmid (m): sc-36821-SH, Vitronectin shRNA Plasmid (r): sc-270256-SH, Vitronectin shRNA (h) Lentiviral Particles: sc-36820-V, Vitronectin shRNA (m) Lentiviral Particles: sc-36821-V and Vitronectin shRNA (r) Lentiviral Particles: sc-270256-V.

Molecular Weight of Vitronectin single chain: 75 kDa.

Molecular Weight of Vitronectin cleaved two-chain forms: 65/10 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, MDCK cell lysate: sc-2252 or Vitronectin (h2): 293T Lysate: sc-170448.

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.

DATA





staining of formalin fixed, paraffin-embedded human

Vitronectin 65/75 (H-270): sc-15332. Western blot analysis of Vitronectin expression in non-transfected: sc-117752 (**A**) and human Vitronectin transfected: sc-170448 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

kidney tissue showing cytoplasmic staining of cells in tubules (A). Immunofluorescence staining of methanolfixed HeLa cells showing cytoplasmic localization (B).

- 1. Zegers, M.M., et al. 2003. Pak1 and PIX regulate contact inhibition during epithelial wound healing. EMBO J. 22: 4155-4165.
- 2. Ong, E., et al. 2005. Role of phosphatidylinositol 3-kinase-y in mediating lung neutrophil sequestration and vascular injury induced by E. coli sepsis. Am. J. Physiol. Lung Cell. Mol. Physiol. 289: 1094-1103.
- 3. Wei, C., et al. 2008. Modification of kidney barrier function by the urokinase receptor. Nat. Med. 14: 55-63.
- 4. Bergmann, S., et al. 2009. Integrin-linked kinase is required for vitronectinmediated internalization of Streptococcus pneumoniae by host cells. J. Cell Sci. 122: 256-267.
- 5. Boissonnas, C.C., et al. 2010. Role of sperm alphavbeta3 integrin in mouse fertilization. Dev. Dyn. 239: 773-783.

PROTOCOLS

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



Try Vitronectin 65/75 (D-8): sc-74484 or Vitronectin 65/75 (B-1): sc-74485, our highly recommended monoclonal aternatives to Vitronectin 65/75 (H-270).