

Vitronectin 10/75 (C-20): sc-7776

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.

REFERENCES

1. Akiyama, S.K., et al. 1981. The structure of fibronectin and its role in cellular adhesion. *J. Supramol. Struct. Cell. Biochem.* 16: 345-348.
2. Ruoslahti, E., et al. 1982. Molecular and biological interactions in fibronectin. *J. Invest. Dermatol.* 79: 65-68.
3. Chain, D., et al. 1991. Plasmin cleavage of vitronectin. Identification of the site and consequent attenuation in binding plasminogen activator inhibitor-1. *FEBS Lett.* 285: 251-256.
4. Bauer, J.S., et al. 1992. Motility of fibronectin receptor-deficient cells on fibronectin and vitronectin: collaborative interactions among integrins. *J. Cell Biol.* 116: 477-487.

CHROMOSOMAL LOCATION

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

SOURCE

Vitronectin 10/75 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Vitronectin 75 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-7776 P, (100 µg 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

Vitronectin 10/75 (C-20) is recommended for detection of Vitronectin 10 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).

Vitronectin 10/75 (C-20) is also recommended for detection of Vitronectin 10 and 75 in additional species, including equine, canine, bovine, porcine and avian.

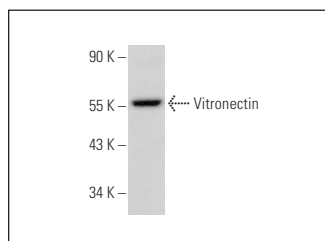
Suitable for use as control antibody for Vitronectin siRNA (h): sc-36820, Vitronectin siRNA (m): sc-36821, Vitronectin shRNA Plasmid (h): sc-36820-SH, Vitronectin shRNA Plasmid (m): sc-36821-SH, Vitronectin shRNA (h) Lentiviral Particles: sc-36820-V and Vitronectin shRNA (m) Lentiviral Particles: sc-36821-V.

Molecular Weight of Vitronectin single chain: 75 kDa.

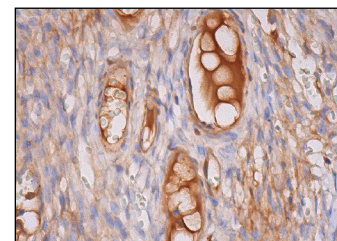
Molecular Weight of Vitronectin cleaved two-chain forms: 65/10 kDa.

Positive Controls: mouse testis extract: sc-2405, NIH/3T3 whole cell lysate: sc-2210 or Hep G2 cell lysate: sc-2227.

DATA



Vitronectin 10/75 (C-20): sc-7776. Western blot analysis of Vitronectin 10/75 expression in mouse testis tissue extract.



Vitronectin 10/75 (C-20): sc-7776. Immunoperoxidase staining of formalin fixed, paraffin-embedded human ovary tissue showing cytoplasmic staining of ovarian stroma cells and staining of plasma in blood vessels.

SELECT PRODUCT CITATIONS

1. Teesalu, T., et al. 2001. Coordinated induction of extracellular proteolysis systems during experimental autoimmune encephalomyelitis in mice. *Am. J. Pathol.* 159: 2227-2237.
2. Roebroek, A.J., et al. 2004. Limited redundancy of the proprotein convertase furin in mouse liver. *J. Biol. Chem.* 279: 53442-53450.

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Try **Vitronectin 65/75 (D-8): sc-74484** or **Vitronectin 65/75 (B-1): sc-74485**, our highly recommended monoclonal alternatives to Vitronectin 10/75 (C-20).