# Vitronectin 10/65/75 (H-202): sc-28929



The Power to Question

## **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.

# CHROMOSOMAL LOCATION

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

## SOURCE

Vitronectin 10/65/75 (H-202) is a rabbit polyclonal antibody raised against amino acids 277-478 mapping at the C-terminus of Vitronectin 10/65/75 of human origin.

## **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

## **APPLICATIONS**

Vitronectin 10/65/75 (H-202) is recommended for detection of Vitronectin 10, 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  $\mu$ g per 100-500  $\mu$ 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).

Molecular Weight of single Vitronectin chain: 75 kDa.

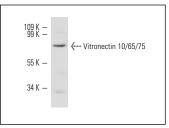
Molecular Weight of cleaved Vitronectin two-chain forms: 65/10 kDa.

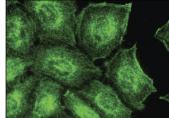
Positive Controls: HeLa whole cell lysate: sc-2200 or Hep G2 cell lysate: sc-2227.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## **DATA**





Vitronectin 10/65/75 (H-202): sc-28929. Western blot analysis of Vitronectin 10/65/75 expression in Hep G2 whole cell lysate

Vitronectin 10/65/75 (H-202): sc-28929. Immunofluorescence staining of methanol-fixed HeLa cells show ing cell surface localization.

#### **SELECT PRODUCT CITATIONS**

- 1. Urbonavicius, S., et al. 2009. Proteomic identification of differentially expressed proteins in aortic wall of patients with ruptured and nonruptured abdominal aortic aneurysms. J. Vasc. Surg. 49: 455-463.
- Mukhopadhyay, P., et al. 2013. MUC4 overexpression augments cell migration and metastasis through EGFR family proteins in triple negative breast cancer cells. PLoS ONE 8: e54455.

#### **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# **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 alternatives to Vitronectin 10/65/75 (H-202).

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