Human Vitronectin Alexa Fluor® 488-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF2349G
100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Vitronectin in direct ELISAs and Western blot.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Human plasma-derived human Vitronectin
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

VN/Vitronectin (vitro-nectin: Latin for "glass" and "to bind to", respectively) is a 65-78 kDa circulating glycoprotein that was initially named for to its ability to 1) bind to glass beads, and 2) attach to cell membranes. Also known as somatomedin-B and Serum Spreading Factor, vitronectin is a matricellular protein that belongs to a group of RGD-type adhesive molecules. It is secreted by hepatocytes and circulates as a monomer/homodimer. Upon binding to ECM or PIA-1, it oligomerizes and becomes active. VN acts as a promoter of cell migration and ECM remodeling. It does so by binding to HSPG in the ECM which exposes binding sites for integrins and uPAR on cells. In this context, VN allows for the formation of a uPAR:soluble uPAR:uPA complex that results in the proteolysis of pericellular matrix and subsequent cell migration. Vitronectin also serves as a receptor for circulating PAI-1. When bound, VN forms oligomers that facilitate subsequent binding to vimentin, a cellular intermediate filament. The vimentin:VN:PAI-1 complex is active, and blocks the enzymatic degradation of vascular clots. Human secreted vitronectin is a 459 amino acid (aa) glycoprotein. It can exist as either a 77-78 kDa monomer, or an internal disulfide-linked 65 kDa:10 kDa heterodimer that arises from proteolytic cleavage between Ala398Thr399. VN has multiple domains, including a somatomedin B domain that binds uPAR and PAI-1 (aa 1-40), an RGD motif (aa 64-66) and a heparin-binding region (aa 340-380). VN is sulfated, N- and O-glycosylated, and phosphorylated on at least five Thr/Ser based sites. Over aa 20-29 (i.e.-DQESCKGRCT), human and mouse VN are identical in their amino acid sequences.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.

Bio-Techne®
Global | bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL: 1.612.379.2956
USA | TEL: 800.343.7475 Canada | TEL: 855.668.8722 Europe | Middle East | Africa TEL: +44.0.1235.529449
China | info.cn@bio-techne.com TEL: 400.821.3475