Datasheet for ABIN2191905

anti-Vitronectin antibody

2 Publications

Go to Product page

Overview

Quantity:	100 µg
Target:	Vitronectin (VTN)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Vitronectin antibody is un-conjugated
Application:	Western Blotting (WB), Immunoprecipitation (IP), Flow Cytometry (FACS), Immunofluorescence (IF), Immunoassay (IA)

Product Details

Clone:	BV1
Sterility:	0.2 µm filtered

Target Details

Target:	Vitronectin (VTN)
Alternative Name:	Vitronectin (VTN Products)
Background:	Monoclonal antibody BV1 recognizes human vitronectin. Vitronectin is an abundant glycoprotein (~75 kDa), consisting of 459 amino acids. About one third of the protein molecular mass is composed of carbohydrates. Vitronectin is found in blood plasma and the extracellular matrix. Vitronectin is a multifunctional protein, since it promotes attachment and spreading of animal cells in vitro, it inhibits cytolysis by the complement C5b-9 complex, and it modulates

Target Details

	antithrombin III-thrombin action in blood coagulation. The protein consists of three domains: the N-terminal Somatomedin B domain (1-39), a central domain with hemopexin homology (131-342) and a C-terminal domain (347-459) also with hemopexin homology. The Somatomedin B domain binds to Plasminogen Activator Inhibitor-1 (PAI-1) and is responsible for PAI-1 stabilization. Furthermore, the Somatomedin B domain can also interact with the urokinase plasminogen activator receptor (uPAR). Vitronectin-uPAR interaction is required and sufficient to initiate downstream changes in cell morphology, migration and signal transduction. High plasma levels of both PAI-1 and uPAR have been shown to correlate with a negative prognosis for cancer patients. Additionally, vitronectin is a component of platelets and is as such involved in hemostasis. Amino acid 45-47 (RGD) are capable of binding to membrane bound integrins, which serve to anchor cells to the extracellular matrix. Vitronectin in plasma is an inactive monomer form. In contrast, tissue vitronectin is an active multimeric form and is able to interact with various matrix ligands like proteoglycans and collagen. Mice with a genetic deletion of vitronectin show delayed wound healing, suggesting an important role of vitronectin in tissue remodeling after injury. The monoclonal antibody BV1 binds to soluble vitronectin as well as to membrane bound vitronectin. Aliases Serum spreading factor, complement S-protein
Pathways:	Autophagy, Smooth Muscle Cell Migration

Application Details

Application Notes:	For flow cytometry, immunofluorescence and Western blotting, dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.
Restrictions:	For Research Use only

Handling

Buffer:	PBS, containing 0.1 % bovine serum albumin and 0.02 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Product should be stored at 4 °C. Under recommended storage conditions, product is stable for one year.

Handling

Expiry Date:	12 months

Publications

Product cited in:	Martìn-Padura, De Castellarnau, Uccini, Pilozzi, Natali, Nicotra, Ughi, Azzolini, Dejana, Ruco: " Expression of VE (vascular endothelial)-cadherin and other endothelial-specific markers in haemangiomas." in: **The Journal of pathology**, Vol. 175, Issue 1, pp. 51-7, (1995) (PubMed). Zanetti, Conforti, Hess, Martìn-Padura, Ghibaudi, Preissner, Dejana: "Clustering of vitronectin and RGD peptides on microspheres leads to engagement of integrins on the luminal aspect of endothelial cell membrane." in: **Blood**, Vol. 84, Issue 4, pp. 1116-23, (1994) (PubMed).