COA CHROM
DIAGNOSTICA

Sheep anti-human Vitronectin

Whole IgG from antiserum
10 mg

Product #: SAVN-IG
Lot #: XXXX
Expiry date: XXXX

Store at –10 to -20°C

For Research Use Only.
Not for use in diagnostic procedures.

Description of Vitronectin

Vitronectin (Vn), previously known as serum-spreading factor or S-protein, is a plasma and serum glycoprotein with a normal concentration ranging from 200 – 400 µg/ml. It exists in both a 75 kDa single-chain form and a 65 + 10 kDa two-chain form. Vitronectin can exist in a least two different conformational forms. The majority of Vn found in the circulation is present in the native ("closed") form. In this form, most of the binding sites for other ligands are cryptic. The second form of Vn, the denatured ("open", multimeric) form, is a result of a conformational change in the native protein induced by denaturants such as urea, adsorption onto surfaces, low pH or reduction and alkylation. This conformational change leads to exposure of the heparin binding site, formation of disulfide-bonded multimers and rupture of the disulfide bond that links the 10 kDa light chain to the 65 kDa heavy chain of the two chain form. The liver is the primary site of Vn synthesis, however, Vn is also found in platelets, megakaryocytes, monocytes and macrophages. Vn plays an important role in a number of physiological and pathophysiological processes. It promotes the adhesion and spreading of a wide variety of cell types and is a subcomponent of the soluble SC5b-9 complex of complement where it protects bystander cells from cytolysis. Vn also plays an important role in fibrinolysis by stabilizing PAI-1 in its active conformation which otherwise rapidly converts to a latent form.[1-3]

REFERENCES and REVIEWS

1. Tomasini, B.R., and Mosher, D.F. Vitronectin. *Prog. Hemost. Thromb.*, 10:269-305, 1991.
2. Hess, S., Stockmann, A., Voler, W., and Preissner, K.T. Multimeric vitronectin: structure and function. In: Biology of Vitronectins and their Receptors. Elsevier Science Publishers, Amsterdam, p. 21-29, 1993.
3. Preissner, K.T., and Jenne, D. Vitronectin: a new molecular connection in haemostasis. *Thrombo. Haemost.*, 66(2):189-194, 1991.

Product Specifications

Description:
Vial containing XXXX ml of whole IgG representing approximately 1 ml of antiserum. Total protein is 10 mg.

Format:
Whole IgG, clear liquid.

Host Animal:
Sheep

Immunogen:
Human Vitronectin purified from plasma.

Concentration:
IgG concentration is XXXX mg/ml, determined by absorbance using an extinction coefficient ($E^{1\%}_{280}$) of 13.4.

Buffer:
10 mM HEPES, pH 7.4, 150 mM NaCl, 50% (v/v) glycerol.

Storage:
Store between –10 and –20°C. Product will become viscous but will not freeze. Avoid storage in frost-free freezers. Keep vial tightly capped. Allow product to warm to room temperature and gently mix before use.

Specificity:
This antibody is specific for vitronectin as demonstrated by immunoelectrophoresis and ELISA.

Applications:
Suitable for use as a source of antibodies to vitronectin.

Species Cross Reactivity: (immunodiffusion vs. citrated plasma)

Human:	XXXX	Mouse:	XXXX	Rat:	XXXX
Rabbit:	XXXX	Pig:	XXXX	Dog:	XXXX