Affinity Biologicals™ INC.

REPRESENTATIVE DATASHEET*

Sheep anti-human Vitronectin

Peroxidase Conjugated Affinity-Purified IgG

0.1 mg

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

Store at –10 to -20°C

1348 Sandhill Drive. Ancaster, Ontario, Canada L9G 4V5
905·304·9896 • 800·903·6020 • fax 905·304·9897

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. Vn 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 vitronectin 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 affinity-purified IgG conjugated to horseradish peroxidase (HRP) through carbohydrate groups. Total protein is 0.1 mg.

Format:
APIgG-HRP conjugate as a clear, slightly red-brown liquid.

Host Animal:
Sheep

Immunogen:
Human Vitronectin purified from plasma.

Concentration:
APIgG-HRP concentration is XXXX mg/ml, determined by absorbance using an extinction coefficient ($E^{1\%}_{280}$) of 14.

Buffer:
A buffered stabilizer solution containing 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. Avoid exposure to sodium azide as this is an inhibitor of peroxidase activity.

Specificity:
Prior to conjugation, this antibody was specific for vitronectin as demonstrated by immunoelectrophoresis and ELISA.

Applications:
Suitable as a source of peroxidase-labeled antibodies to vitronectin.

Rz Ratio (Reinheitszahl, A 403/A280):
XXXX as determined spectrophotometrically.

Related Products:

Cat #: **SAVN-IG**	Sheep anti-human vitronectin, whole IgG from antiserum
Cat #: **SAVN-AP**	Sheep anti-human vitronectin, affinity purified IgG

Visit our site (www.affinitybiologicals.com) for details.

Manufactured in Canada by:
AFFINITY BIOLOGICALS INC.
1348 Sandhill Drive
Ancaster ON CANADA L9G 4V5
Tel: (905) 304-9896
(800) 903-6020
Fax: (905) 304-9897
info@affinitybiologicals.com