



# Sheep anti Rat Von Willebrand Factor polyclonal antibody [HRP] (CABT-L439)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

Specificity	Prior to conjugation, this antibody was specific for rat vWF as demonstrated by immunoelectrophoresis and ELISA.
Target	vWF
Immunogen	Rat vWF purified from plasma.
Isotype	IgG
Source/Host	Sheep
Species Reactivity	Rat
Conjugate	HRP
Applications	Suitable for use in IEP, ELISA.  Each laboratory should determine an optimum working titer for use in its particular application.  Other applications have not been tested but use in such assays should not necessarily be excluded.
Format	Liquid
Size	200 μg
Buffer	A buffered stabilizer solution containing 50% (v/v) glycerol.
Preservative	None
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

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### **BACKGROUND**

#### Introduction

von Willebrand Factor (vWF, also previously referred to as Factor VIII related antigen) is a large adhesive protein produced in endothelial cells and megakaryocytes. There are two critical functions of vWF, the first being its involvement in the process of platelet adhesion and aggregation through interaction with platelet receptor glycoprotein lb, the second being the binding and stabilization of Factor VIII (antihemophilic factor) for secretion and transport in plasma. The vWF precursor protein is synthesized with a 95,000 dalton propeptide (also known as vWF antigen-II), believed to be involved in the intracellular multimerization of the vWF subunits. The mature vWF multimers are then packed into storage organelles within the cell (Weibel-Palade bodies) after which the propeptide is cleaved and released. vWF circulates as multimers of disulphide linked 220,000 dalton subunits and the molecular weight of these multimers ranges from 0.5-20 million daltons. The concentration of vWF in human plasma is typically 10 µg/ml, but increased levels are often observed in pregnancy and other conditions of physiological stress. von Willebrand's disease (vWD) is perhaps the most common inherited bleeding disorder in humans and is the result of either quantitative deficiencies of vWF (vWD Types I & III), or one of a number of qualitative disorders of vWF structure and function (vWD Type II).

Keywords

VWF;von Willebrand factor;VWD;F8VWF;coagulation factor VIII VWF

# **GENE INFORMATION**

Entrez Gene ID <u>116669</u>

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