



# Anti-Von Willebrand factor monoclonal antibody, clone RFF-VIII R/1 (CABT-49489MH)

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

## PRODUCT INFORMATION

### Product Overview

Mouse anti Human von Willebrand factor antibody, clone RFF-VIII R/1 recognizes human von Willebrand factor (vWF), also known as Factor VIII related antigen, a blood glycoprotein involved in blood coagulation. It stabilises circulating Factor VIII by binding to it and protecting it from cleavage and delivers it to sites of vascular injury. vWF also promotes the adhesion of platelets to sites of vascular damage by forming a molecular bridge between collagen on exposed endothelial cells and the GPIb binding sites of platelets circulating in the blood. vWF circulates in the blood as large multimers, with each monomer (250kDa) containing a number of specific domains. Hereditary or acquired defects in vWF lead to von Willebrand disease (vWD), characterised by varying degrees of susceptibility to bleeding. Symptoms might include nosebleeds, bleeding gums, easy bruising, menorrhagia or gastrointestinal bleeding. Various forms of vWD exist with differing severities, determined by the type of defect. Mouse anti Human von Willebrand factor, clone RFF-VIII R/1 has a high affinity for an epitope within the platelet GPIb-binding site that is responsible for biological activity. As such the antibody is a potent inhibitor of vWF activity. It can completely neutralise ristocetin-induced platelet aggregation and ristocetin-induced binding of vWF to platelets. It also inhibits platelet adhesion to glass beads. The epitope recognized is present only on the intact multimeric form of vWF and is abolished by mild denaturation with SDS. Mouse anti Human von Willebrand factor, clone RFF-VIII R/1 does not recognize human Factor VIII. Clone RF-VIII R/1 may be used as a capture antibody in immunoassays for vWF in combination with clone RFF-VIII R/2 as a detection reagent.

<b>Specificity</b>	VWF
<b>Target</b>	Von Willebrand factor
<b>Immunogen</b>	Human Factor VIII complex partially purified from Factor VIII concentrate.
<b>Isotype</b>	IgG1
<b>Source/Host</b>	Mouse

<b>Species Reactivity</b>	Human
<b>Clone</b>	RFF-VIII R/1
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	ELISA; IHC-P; Protein; Purification; RIA
<b>Format</b>	Purified IgG - liquid
<b>Size</b>	200 µg
<b>Preservative</b>	See individual product datasheet
<b>Storage</b>	in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">VWF von Willebrand factor [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	VWF
<b>Synonyms</b>	VWF; von Willebrand factor; VWD; F8VWF; coagulation factor VIII VWF;
<b>Entrez Gene ID</b>	<a href="#">7450</a>
<b>Protein Refseq</b>	<a href="#">NP_000543</a>
<b>UniProt ID</b>	P04275
<b>Chromosome Location</b>	12p13.3
<b>Pathway</b>	Blood Clotting Cascade; Complement and Coagulation Cascades; Complement and coagulation cascades; ECM-receptor interaction; Focal Adhesion; Focal adhesion; Formation of Fibrin Clot (Clotting Cascade); GP1b-IX-V activation signalling;
<b>Function</b>	chaperone binding; collagen binding; glycoprotein binding; identical protein binding; immunoglobulin binding; integrin binding; protease binding; protein N-terminus binding; protein binding; protein homodimerization activity;