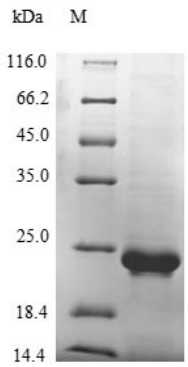
Recombinant Mouse von Willebrand factor (Vwf), partial

Product Code	CSB-EP025960MO
Relevance	Important in the maintenance of hemostasis, it promotes adhesion of platelets to the sites of vascular injury by forming a molecular bridge between sub-endothelial collagen matrix and platelet-surface receptor complex GPIb-IX-V. Also acts as a chaperone for coagulation factor VIII, delivering it to the site of injury, stabilizing its heterodimeric structure and protecting it from premature clearance from plasma.
Abbreviation	Recombinant Mouse Vwf protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q8CIZ8
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	DVVFVLEGSDEVGEANFNKSKEFVEEVIQRMDVSPDATRISVLQYSYTVTMEY AFNGAQSKEEVLRHVREIRYQGGNRTNTGQALQYLSEHSFSPSQGDRVEAPN LVYMVTGNPASDEIKRLPGDIQVVPIGVGPHANMQELERISRPIAPIFIRDFETLP REAPDLV
Research Area	Cardiovascular
Source	E.coli
Target Names	Vwf
Protein Names	von Willebrand antigen II
Expression Region	1498-1665aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged and C-terminal Myc-tagged
Mol. Weight	23.9 kDa
Protein Length	Partial
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The recombinant Mouse Vwf protein is encoded by the gene of Vwf (1498-1665aa). The gene of Vwf was cloned in a system (E.coli) that supported the expression of Vwf and translation of messenger RNA. Modification of Vwf by recombinant DNA technology could lead to the expression of the target protein. The protein was fused with N-terminal 10xHis tag & C-terminal Myc tag in the production. The purity is 85% determined by SDS-PAGE.

Vwf is a protein coding gene that encodes von Willebrand factor. According to some studies, Vwf may have the following features.
Assay of vWF-cleaving proteases based on decreased collagen-binding affinity of degraded vWF. Type 1 VWD is characterized by a partial quantitative deficiency of vWF. The full-length vWF cDNA encodes a highly repetitive protein that is much larger than the mature vWF subunit. The platelet-VWF complex is the preferred substrate for ADAMTS13 under fluid shear stress. Inhibition of the VWF-collagen interaction with an anti-human VWF monoclonal antibody resulted in abolished arterial platelet thrombus formation in baboons. The phenotype of VWF survival was found in a subgroup of patients with type 1 VWD. Low VWF levels may be associated with massive bleeding, mainly due to reduced VWF synthesis and/or constitutive secretion.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.
Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.