# abcam

## Product datasheet

## Mouse Von Willebrand Factor A2 ELISA Kit, Fluorescent ab229397

Tall CatchPoint SimpleStep ELISA

1 References 5 图像

概述

产品名称

小鼠Von Willebrand Factor A2 ELISA试剂盒, Fluorescent

检测方法

Fluorescent

精确度

批次内

样品	n	Mean	SD	CV%
Plasma	5			5.3%

批次间

样品	n	Mean	SD	CV%	
Plasma	3			13.3%	

样品类型

Cell culture supernatant, Serum, Hep Plasma, EDTA Plasma, Cit plasma

检测类型

Sandwich (quantitative)

灵敏度

7.1 pg/ml

范围

13.67 pg/ml - 7000 pg/ml

回收率

特定样本回收率

样品类型	平均%	范围
Serum	83.6	80.2% - 89.7%
Hep Plasma	82.2	78.8% - 86.7%
EDTA Plasma	94.4	88.2% - 98.3%
Cit plasma	86.3	82.7% - 90.3%
serum free media	79	70.9% - 83.8%

检测时间 1h 30m

实验**步**骤 One step assay

种属反应性 与反应: Mouse

不与反应: Goat, Pig

产品概述

Von Willebrand Factor A2 *in vitro* CatchPoint<sup>®</sup> SimpleStep ELISA<sup>®</sup> (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative measurement of Von Willebrand Factor A2 protein in mouse serum, plasma, and cell culture supernatant samples.

This CatchPoint SimpleStep ELISA kit has been **optimized for Molecular Devices Microplate Readers**. Click **here** for a list of recommended Microplate Readers.

If using a Molecular Devices' plate reader supported by SoftMax® Pro software, a preconfigured protocol for these CatchPoint SimpleStep ELISA Kits is available with all the protocol and analysis settings at <a href="https://www.softmaxpro.org">www.softmaxpro.org</a>.

The CatchPoint<sup>®</sup> SimpleStep ELISA<sup>®</sup> employs an affinity tag labeled capture antibody and a reporter conjugated detector antibody which immunocapture the sample analyte in solution. This entire complex (capture antibody/analyte/detector antibody) is in turn immobilized via immunoaffinity of an anti-tag antibody coating the well. To perform the assay, samples or standards are added to the wells, followed by the antibody mix. After incubation, the wells are washed to remove unbound material. CatchPoint HRP Development Solution containing the Stoplight Red Substrate is added. During incubation, the substrate is catalyzed by HRP generating a fluorescent product. Signal is generated proportionally to the amount of bound analyte and the intensity is measured in a fluorescence plater reader at 530/570/590 nm Excitation/Cutoff/Emission.

www A2 and www (von Willebrand Factor) are distinct proteins with non-overlapping amino acid sequences generated by proteolytic cleavage from the same precursor protein during intracellular processing. Www is important in the maintenance of hemostasis; it is a glycoprotein that circulates in plasma as a series of high molecular weight multimers and mediates the adhesion of platelets to exposed sub-endothelium. www is synthesized in endothelial cells and megakaryocytes. www A2 is found in plasma and platelets, from which they are released by their activation including thrombin. Both www and www A2 are deficient in von Willebrand's disease.

Pre-coated microplate (12 x 8 well strips)

平台

说明

### 性能

## 存放说明

#### Store at +4°C. Please refer to protocols.

组 <b>件</b>	1 x 96 tests
100X Stoplight Red Substrate	1 x 120µl
10X Mouse vWF A2 Capture Antibody	1 x 600µl
10X Mouse vWF A2 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
500X Hydrogen Peroxide (H2O2, 3%)	1 x 50µl

组 <b>件</b>	1 x 96 tests
Antibody Diluent 4BR	1 x 6ml
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated Black 96-Well Microplate	1 unit
Stoplight Red Substrate Buffer	1 x 12ml
Mouse vWF A2 Lyophilized Recombinant Protein	2 vials

功能

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 GPlb-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.

组织特异性

Plasma.

疾病相关

Defects in VWF are the cause of von Willebrand disease (VWD) [MIM:277480]. VWD defines a group of hemorrhagic disorders in which the von Willebrand factor is either quantitatively or qualitatively abnormal resulting in altered platelet function. Symptoms vary depending on severity and disease type but may include prolonged bleeding time, deficiency of factor VIII and impaired platelet adhesion. Type I von Willebrand disease is the most common form and is characterized by partial quantitative plasmatic deficiency of an otherwise structurally and functionally normal Willebrand factor; type II is associated with a qualitative deficiency and functional anomalies of the Willebrand factor; type III is the most severe form and is characterized by total or near-total absence of Willebrand factor in the plasma and cellular compartments, also leading to a profound deficiency of plasmatic factor VIII.

序列相似性

Contains 1 CTCK (C-terminal cystine knot-like) domain.

Contains 4 TIL (trypsin inhibitory-like) domains.

Contains 3 VWFA domains. Contains 3 VWFC domains. Contains 4 VWFD domains.

结构域

The von Willebrand antigen 2 is required for multimerization of vWF and for its targeting to

storage granules.

翻译后修饰

All cysteine residues are involved in intrachain or interchain disulfide bonds.

N- and O-glycosylated.

细胞定位

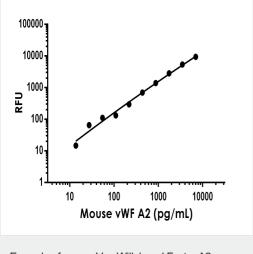
Secreted. Secreted > extracellular space > extracellular matrix. Localized to storage granules.

图片



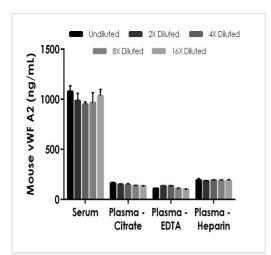
Other - Mouse Von Willebrand Factor A2 ELISA Kit, Fluorescent (ab229397)

SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.

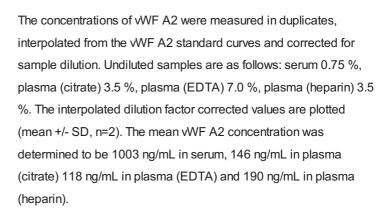


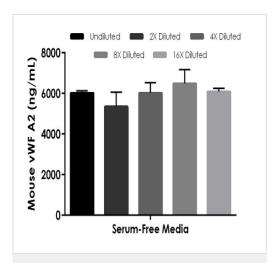
Example of mouse Von Willebrand Factor A2 standard curve in Sample Diluent NS

Background-subtracted data values (mean +/- SD) are graphed.



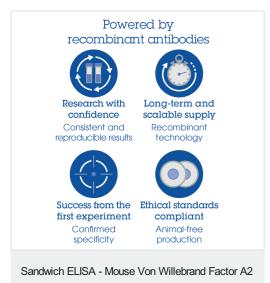
Interpolated concentrations of native WWF A2 in mouse serum and plasma samples.





Interpolated concentrations of spiked mouse recombinant WF A2 in serum-free cell culture media samples.

The concentrations of vWF A2 were measured in duplicates, interpolated from the vWF A2 standard curves and corrected for sample dilution. Undiluted samples are as follows: 7,000 pg/mL of vWF A2 in 100% serum-free cell culture media. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean spiked vWF A2 concentration was determined to be 5962 pg/mL in serum-free cell culture media.



ELISA Kit, Fluorescent (ab229397)

To learn more about the advantages of recombinant antibodies see **here**.

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