

**APC622Hu01 100µg**  
**Active Multimerin 1 (MMRN1)**  
**Organism Species: *Homo sapiens* (Human)**  
***Instruction manual***

FOR RESEARCH USE ONLY  
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

---

---

13th Edition (Revised in Aug, 2023)

## **[ PROPERTIES ]**

**Source:** Prokaryotic expression.

**Host:** *E. coli*

**Residues:** Ala807~Gly1053

**Tags:** N-terminal His-tag

**Purity:** >95%

**Endotoxin Level:** <1.0EU per 1µg (determined by the LAL method).

**Buffer Formulation:** PBS, pH7.4, containing 0.01% SKL, 5%Trehalose .

**Original Concentration:** 200µg/mL

**Applications:** Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

**Predicted isoelectric point:** 9.4

**Predicted Molecular Mass:** 29.3kDa

**Accurate Molecular Mass:** 30kDa as determined by SDS-PAGE reducing conditions.

## **[ USAGE ]**

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

## **[ STORAGE AND STABILITY ]**

**Storage:** Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

**Stability Test:** The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

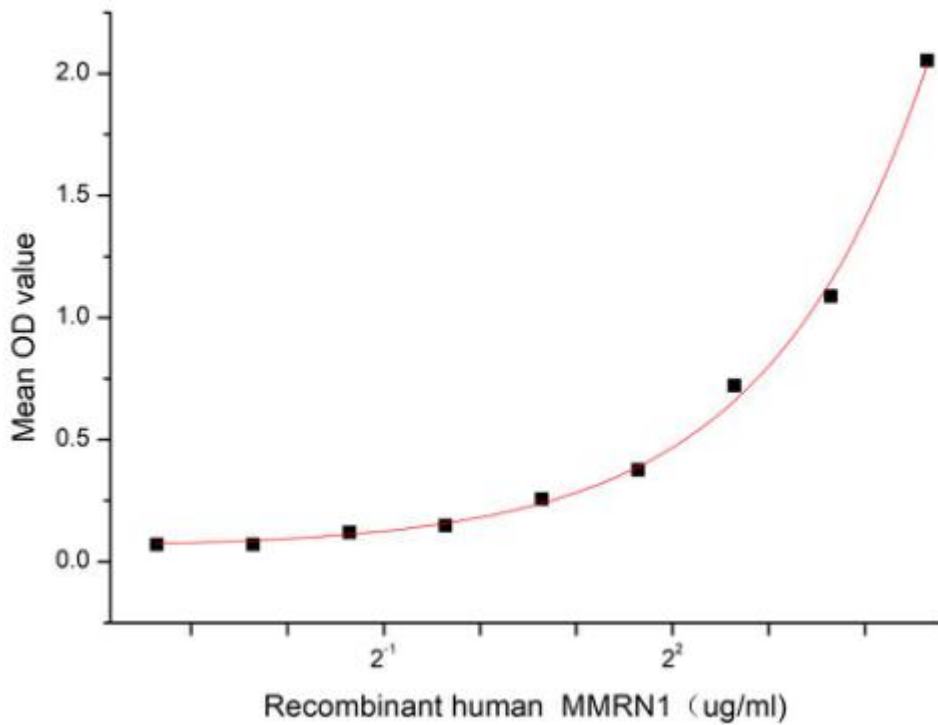
## [ **SEQUENCE** ]

AGIP RDEKLNQSNF QKMYQMFNET TSQVRKYQQN MSHLEEKLLL  
TTKISKNFET RLQDIESKVT QTLIPYYISV KKGSVVTNER DQALQLQVLN  
SRFKALEAKS IHLSINFFSL NKTLEVLTM CHNASTSVSE LNATIPKWKI  
HSLPDIQLLQ KGLTEFVEPI IQIKTQAALS NLTCCIDRSL PGSLANVVK  
QKQVKS LPPKK INALKKPTVN LTTVLIGRTQ RNTDNIIYPE EYSSCSRHPC  
QNG

## [ **ACTIVITY** ]

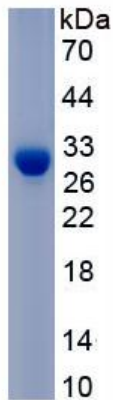
Multimerin 1 (MMRN1) is a secreted glycoprotein that consists of multiple subunits, forming a complex with a molecular weight of approximately 150 kDa. MMRN1 is a member of the multimerin family and it is mainly expressed in platelets and endothelial cells. MMRN1 plays an important role in maintaining vascular integrity, regulating clotting and inflammatory responses, among others. In addition, the binding of MMRN1 to Vitronectin (VTN) plays an important role in a variety of physiological and pathological processes, including cell adhesion, migration, blood coagulation, and cell signaling. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human MMRN1 and recombinant human VTN. Briefly, MMRN1 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100  $\mu$ l were then transferred to VTN-coated microtiter wells and incubated for 1h at 37 °C. Wells were washed with PBST and incubated for 1h with anti-MMRN1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37 °C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 °C. Finally, add 50  $\mu$ L stop solution to the wells and

read at 450/630 nm immediately. The binding activity of recombinant human MMRN1 and recombinant human VTN was shown in Figure 1, and this effect was in a dose dependent manner.



**Figure 1. The binding activity of recombinant human MMRN1 and recombinant human VTN**

**[ IDENTIFICATION ]**



**Figure 2. SDS-PAGE**

**Sample: Active recombinant MMRN1, Human**

**[ IMPORTANT NOTE ]**

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.