

**RPA543Hu01 10µg**

**Recombinant Immunoglobulin M (IgM)**

**Organism Species: *Homo sapiens (Human)***

***Instruction manual***

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

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13th Edition (Revised in Aug, 2023)

## **[ PROPERTIES ]**

**Source:** Prokaryotic expression

**Host:** *E.coli*

**Residues:** Gly1~Tyr453

**Tags:** N-terminal His Tag

**Subcellular Location:** Membrane, Secreted

**Purity:** > 80%

**Traits:** Freeze-dried powder

**Buffer formulation:** 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% Sarcosyl, 5% Trehalose and Proclin300.

**Original Concentration:** 250µg/mL

**Applications:** Positive Control; Immunogen; SDS-PAGE; WB.

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

**Predicted isoelectric point:** 6.8

**Predicted Molecular Mass:** 53.1kDa

**Accurate Molecular Mass:** 59kDa as determined by SDS-PAGE reducing conditions.

### **Phenomenon explanation:**

The possible reasons that the actual band size differs from the predicted are as follows:

1. Splice variants: Alternative splicing may create different sized proteins from the same gene.
2. Relative charge: The composition of amino acids may affects the charge of the protein.
3. Post-translational modification: Phosphorylation, glycosylation, methylation etc.
4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form.
5. Polymerization of the target protein: Dimerization, multimerization etc.

## **[ USAGE ]**

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) 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.

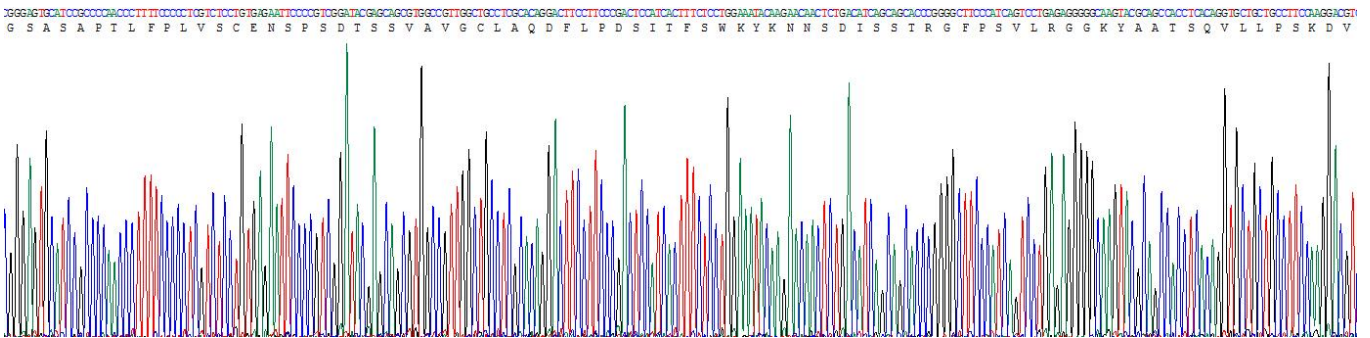
Aliquot and store at -80°C for 12 months.

**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 ]**

|            |            |            |            |            |
|------------|------------|------------|------------|------------|
| GSASAPTLFP | LVSCENSPSD | TSSVAVGCLA | QDFLPDSITF | SWKYKNNSDI |
| SSTRGFPSVL | RGGKYAATSQ | VLLPSKDVMQ | GTDEHVVCKV | QHPNGNKEKN |
| VPLPVIAELP | PKVSFVPPR  | DGFFGNPRKS | KLICQATGFS | PRQIQVSWLR |
| EGKQVGSGVT | TDQVQAEAKE | SGPTTYKVTS | TLTIKESDWL | GQSMFTCRVD |
| HRGLTFQQNA | SSMCVPDQDT | AIRVFAIPPS | FASIFLTGST | KLTCLVTDLT |
| TYDSVTISWT | RQNGEAVKTH | TNISESHRNA | TFSAVGEASI | CEDDWNSEGR |
| FTCTVHTDL  | PSPLKQTISR | PKGVALHRPD | VYLLPPAREQ | LNLRESATIT |
| CLVTGFSPAD | VFVQWMQRGQ | PLSPEKYVTS | APMPEPQAPG | RYFAHSILTV |
| SEEEWNTGET | YTCVVAHEAL | PNRVTERTVD | KSTGKPTLYN | VSLVMSDTAG |
| TCY        |            |            |            |            |

**[ IDENTIFICATION ]**



### Figure. Gene Sequencing (Extract)

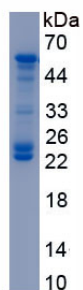


Figure. SDS-PAGE

**[ 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.