

**RPB830Hu01 50µg**

**Recombinant Transglutaminase 2 (TGM2)**

**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:** Met1~Ala687

**Tags:** N-terminal His Tag

**Subcellular Location:** Secreted

**Purity:** > 80%

**Traits:** Freeze-dried powder

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

**Original Concentration:** 50µg/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:** 4.8

**Predicted Molecular Mass:** 78.6kDa

**Accurate Molecular Mass:** 100kDa 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 ddH<sub>2</sub>O to a concentration of 0.1-0.5 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.

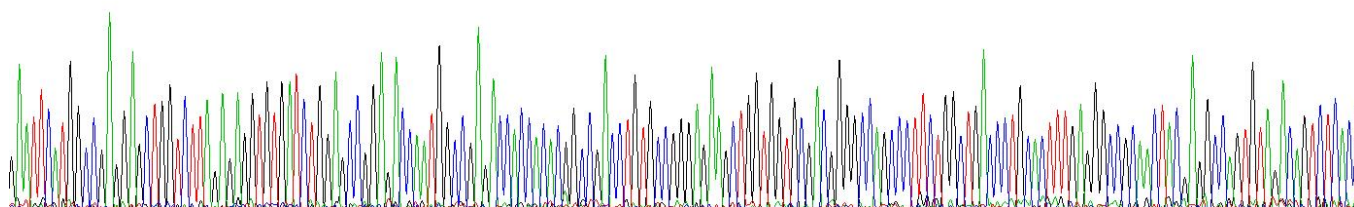
**Stability Test:** The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration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

### [ SEQUENCE ]

```
MAEELVLERC DLELETNGRD HHTADLCREK LVVRRGQPFW LTLHFEGRNY
EASVDSLTFV VVTGPAPSQE AGTKARFPLR DAVEEGDWT A TVVDQQDCTL
SLQLTTPANA PIGLYRLSLE ASTGYQGSSF VLGHFILLFN AWC PADAVYL
DSEEERQEYV LTQQGFYIYQ SAKFIKNIPW NFGQFEDGIL DICLILLDVN
PKFLKNAGRD CSRRSSPVYV GRVVS GMVNC NDDQGVLLGR WDN NYGDGVS
PMSWIGSVDI LRRWKNHGCQ RVKYQCWVF AAVACTVLRC LGIPTRVVTN
YNSAHDQNSN LLIEYFRNEF GEIQGDKSEM IWNFHCWVES WMTRPDLQPG
YEGWQALDPT PQEKSEGTYC CGPVPVRAIK EGD LSTKYDA PFVFAEVNAD
VVDWIQQDDG SVHKSINRSL IVGLKISTKS VGRDEREDIT HTYKYPEGSS
EEREAFTAN HLNKLAKEE TGMAMRIRVG QSMNMGSDFD VFAHITNNTA
EEYVCRLLLC ARTVSYNGIL GPECGTKYLL NLNLEPFSEK SVPLCILYK
YRDCLTESNL IKVRALLVEP VINSYLLAER DLYLENPEIK IRILGEPKQK
RKLVAEVS LQ NPLPVALEGC TFTVEGAGLT EEQKTVEIPD PVEAGEEVKV
RMDLLPLHMG LHKLVVN FES DKLKAVKGFR NVIIGPA
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### [ IDENTIFICATION ]

GAATTGATGGCGAGGAGCTGCTTTAGAGAGTGTGATCTGGAGCGGAGAGCCAAAGGCGGAGAGCAGCAGCAGCGCGAGCTGTGCGGGAGAGCTGGTGGTGGAGGGGGGAGGCGCTTCTGGCTGAGCCTGCACCTTGGAGGCGCAGCTAGGAGGCGAGCTGTAGACAGTCTCAGC



**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.