

**RPB486Mu01 50µg**  
**Recombinant Calreticulin (CRT)**  
**Organism Species: *Mus musculus* (Mouse)**  
***Instruction manual***

FOR IN VITRO USE AND RESEARCH USE ONLY  
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

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12th Edition (Revised in Aug, 2016)

## [ **PROPERTIES** ]

**Source:** Prokaryotic expression.

**Host:** *E. coli*

**Residues:** Asp199~Tyr308

**Tags:** N-terminal His-Tag

**Tissue Specificity:** Liver, Brain.

**Subcellular Location:** Endoplasmic reticulum lumen. Cytoplasmic granule.

Sarcoplasmic reticulum lumen.

**Purity:** >92%

**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:** 200µg/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:** 14.9kDa

**Accurate Molecular Mass:** 22kDa 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 ]

DW

DFLPPKKIKD PDAAKPEDWD ERAKIDDPTD SKPEDWDKPE HIPDPDAKKP  
 EDWDEEMDGE WEPPVIQNPE YKGEWKPRQI DNPDYKGTWI HPEIDNPEYS  
 PDANIYAY

## [ IDENTIFICATION ]

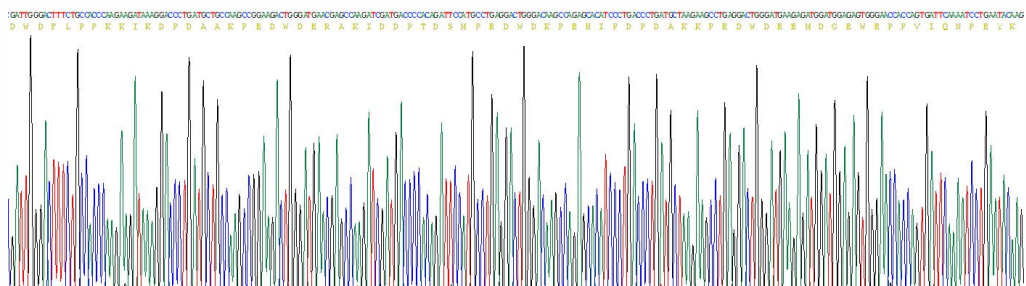
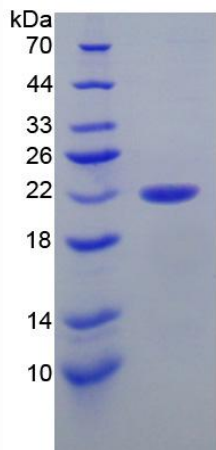


Figure 1. Gene Sequencing (Extract)



**Figure 2. SDS-PAGE**