

RPB854Ra01 100ug

**Recombinant Calumenin (CALU)** 

Organism Species: Rattus norvegicus (Rat)

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: Lys20~Phe315+SSTTTTTTEIRLLTKPERKLSWLLPPLSNN

Tags: N-terminal His Tag

Subcellular Location: Secreted, Golgi apparatus, Endoplasmic reticulum lumen

**Purity:** > 90%

Traits: Freeze-dried powder

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

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: 4.5

Predicted Molecular Mass: 42.3kDa

**Accurate Molecular Mass:** 58kDa 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 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.

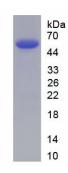
Aliquot and store at -80°C for 12 months.

**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]

K PTEKKDRVHH EPQLSDKVHN DAQNFDYDHD AFLGAEEAKS FDQLTPEESK ERLGKIVNKI DGDKDGFVTV DELKGWIKFA QKRWIHEDVE RQWKGHDLNE DGLVSWEEYK NATYSYVLDD PDPDDGFNYK QMMVRDERRF KMADKDGDLI ATKEEFTAFL HPEEYDYMKD IVVQETMEDI DKNADGFIDL EEYIGDMYSH DGNADEPEWV KTEREQFVEF RDKNRDGKMD KEETKDWILP SDYDHAEAEA RHLVYESDQD KDGKLTKEEI VDKYDLFVGS QATDFGEALV RHDEFSSTTTTTTEIRLLTKPERKLSWLLPPLSNN

### [ IDENTIFICATION ]



# [ 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.