

EPB280Hu61 10µg

**Eukaryotic Cathepsin D (CTSD)** 

Organism Species: Homo sapiens (Human)

Instruction manual

FOR RESEARCH USE ONLY NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

12th Edition (Revised in Aug, 2016)



# [PROPERTIES]

Source: Eukaryotic expression

Host: 293F cell

Residues: Leu21~Leu412

Tags: N-terminal His Tag

Subcellular Location: Secreted

**Purity:** > 97%

Traits: Freeze-dried powder

**Buffer formulation:** PBS, pH7.4, containing 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: 6.1

Predicted Molecular Mass: 44.2kDa

**Accurate Molecular Mass:** 50kDa 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 ]

```
LVRIPLHKFT SIRRTMSEVG GSVEDLIAKG
PVSKYSQAVP AVTEGPIPEV LKNYMDAQYY GEIGIGTPPQ CFTVVFDTGS
SNLWVPSIHC KLLDIACWIH HKYNSDKSST YVKNGTSFDI HYGSGSLSGY
LSQDTVSVPC QSASSASALG GVKVERQVFG EATKQPGITF IAAKFDGILG
MAYPRISVNN VLPVFDNLMQ QKLVDQNIFS FYLSRDPDAQ PGGELMLGGT
DSKYYKGSLS YLNVTRKAYW QVHLDQVEVA SGLTLCKEGC EAIVDTGTSL
MVGPVDEVRE LQKAIGAVPL IQGEYMIPCE KVSTLPAITL KLGGKGYKLS
PEDYTLKVSQ AGKTLCLSGF MGMDIPPPSG PLWILGDVFI GRYYTVFDRD
NNRVGFAEAA RL
```

### [ IDENTIFICATION ]

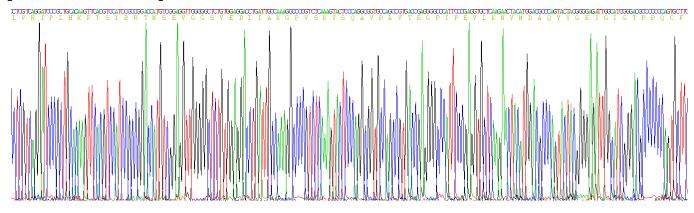


Figure. Gene Sequencing (Extract)



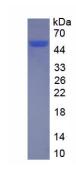


Figure. SDS-PAGE

# [ 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.