RPE136Hu01 10µg Recombinant Defensin Alpha 1B (DEFa1B) Organism Species: Homo sapiens (Human) *Instruction manual* 

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

12th Edition (Revised in Aug, 2016)

# Cloud-Clone Corp.

## [PROPERTIES]

**Source:** Prokaryotic expression.

Host: E. coli

Residues: Glu20~Cys94

Tags: Two N-terminal Tags, His-tag and GST-tag

Tissue Specificity: Kidney, Spleen.

Subcellular Location: Secreted.

**Purity:** >90%

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: 5.7

Predicted Molecular Mass: 38.2kDa

Accurate Molecular Mass: 42kDa as determined by SDS-PAGE reducing conditions.

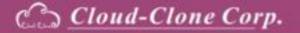
#### Phenomenon explanation:

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.

# [ <u>USAGE</u> ]

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]

E PLQARADEVA AAPEQIAADI PEVVVSLAWD ESLAPKHPGS RKNMACYCRI PACIAGERRY GTCIYQGRLW AFCC [ IDENTIFICATION ]

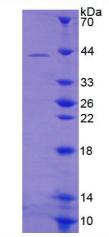


Figure 1. SDS-PAGE