

**RPC538Hu01 100µg**

**Recombinant Islet Cell Autoantigen 1 (ICA1)**

**Organism Species: Homo sapiens (Human)**

***Instruction manual***

FOR IN VITRO USE AND RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

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11th Edition (Revised in May, 2016)

## **[ PROPERTIES ]**

**Source:** Prokaryotic expression.

**Host:** *E. coli*

**Residues:** Met1~Gly258

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

**Tissue Specificity:** Brain.

**Subcellular Location:** Cytoplasm, cytosol. Golgi apparatus membrane; Cytoplasmic vesicle, secretory vesicle membrane; secretory vesicle. Peripheral membrane protein.

**Purity:** >95%

**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:** 200ug/mL

**Applications:** SDS-PAGE; WB; ELISA; IP; CoIP; Purification; Amine Reactive Labeling.

(May be suitable for use in other assays to be determined by the end user.)

**Predicted isoelectric point:** 8.8

**Predicted Molecular Mass:** 36.9kDa

**Accurate Molecular Mass:** 27kDa 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.

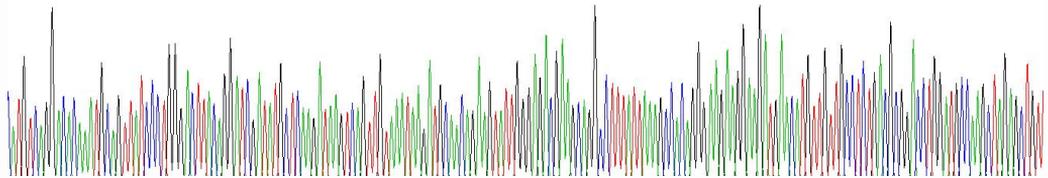
**Stability Test:** The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration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

## **[ SEQUENCE ]**

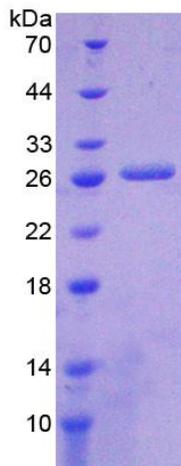
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MSGHKCSYPW DLQDRYAQDK SVVNKMQQKY WETKQAFIKA TGKKEDEHVV
ASDADLDAKL ELFHSIQRTC LDLSKAIVLY QKRICFLSQE ENELGKFLRS
QGFQDKTRAG KMMQATGKAL CFSSQQLAL RNPLCRFHQE VETFRHRAIS
DTWLTVNRME QCRTEYRGAL LWMKDVSQEL DPDLYKQMEK FRKVQTQVRL
AKKNFDKLM DVCQKVDLLG ASRCNLLSHM LATYQTLLH FWEKTSHTMA
AIHESFKG
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## [ IDENTIFICATION ]

24 TGTGGGACAAATGCGTTATCC TGGGACTTTCAGGATGATATGCTCAGATATGTCAGTTGTAATATGATGCAACGAGATATTGGGAGAGGAGCGAGGOCITTTATTAAAGCCACAGGAGAGAGGATGATGATGTTGTGGCTCTGAGCGGAGCTGGATGCCAGCTAGAGCTGT  
H S G R C S V R V L Q D E Y A C D K S Y F H R R Q Q R Y R E T V Q A F I F A T C R R E D E E F V A S D A D L D A R L E E F



**Figure 1. Gene Sequencing (Extract)**



**Figure 2. SDS-PAGE**