

**RPC904Mu02 200µg**

**Recombinant Glutamate Decarboxylase 1, Brain (GAD1)**

**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:** Met1~Leu97

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

**Tissue Specificity:** Testis, Adrenal Gland.

**Purity:** >95%

**Traits:** Freeze-dried powder

**Buffer formulation:** 10mM PBS, pH7.4, containing 1mM DTT, 5% trehalose, 0.01% sarcosyl 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:** 6.7

**Predicted Molecular Mass:** 40.6kDa

**Accurate Molecular Mass:** 38&41kDa 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.

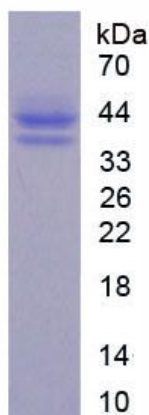
Aliquot and store at -80°C for 12 months.

**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** ]

MASSTPSPAT SSNAGADPNT TNLRPTTYDT WCGVAHGCTR KLGLKICGFL  
QRTNSLEEKs RLVSAFRERQ SSKNLLSCEN SDQGARFRRT ETDFSNL

## [ **IDENTIFICATION** ]



**Figure 1. SDS-PAGE**