

**Human CellExp GAD1, human recombinant protein**  
**GAD1, CPSQ1, GAD, SCP, GAD-1, CPSQ-1, GAD67, GAD-67**  
**Catalog # PBV10880r****Specification**

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**Human CellExp GAD1, human recombinant protein - Product info**Primary Accession  
Calculated MW[O99259](#)

This protein is fused with 6×his tag at C-terminus, has a calculated MW of 67 kDa expressed. The predicted N-terminus is Met1. Protein migrates as the predominant 64 kDa form and a less-frequent 24-kDa form in reduced SDS-PAGE resulting from alternative splicing. KDa

**Human CellExp GAD1, human recombinant protein - Additional Info**Gene ID **2571**  
Gene Symbol **GAD1**  
**Other Names**  
GAD1, CPSQ1, GAD, SCP, GAD-1, CPSQ-1, GAD67, GAD-67Gene Source **Human**  
Source **HEK 293 cells**  
Assay&Purity **SDS-PAGE; ≥92%**  
Assay2&Purity2 **HPLC;**  
Recombinant **Yes**  
**Target/Specificity**  
GAD1**Application Notes**

Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

**Format**

Lyophilized powder

**Storage**

-20°C; Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4, 1 mM EDTA with some stabilizer. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.

**Human CellExp GAD1, human recombinant protein - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)

- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **Human CellExp GAD1, human recombinant protein - Images**

#### **Human CellExp GAD1, human recombinant protein - Background**

Glutamate decarboxylase 1 (GAD1), also known as 67 kDa glutamic acid decarboxylase and Glutamate decarboxylase 67 kDa isoform, is a member of the group II decarboxylase family. GAD1 is expressed in benign and malignant prostatic tissue and may serve as a highly prostate-specific tissue biomarker. GAD1 is responsible for catalyzing the production of gamma-aminobutyric acid from L-glutamic acid. A pathogenic role for this enzyme has been identified in the human pancreas since it has been identified as an autoantigen and an autoreactive T cell target in insulin-dependent diabetes. GAD1 may also play a role in the stiff man syndrome. Defects in GAD1 are the cause of cerebral palsy spastic quadriplegic type 1 (CPSQ1) which is a non-progressive disorder of movement and/or posture resulting from defects in the developing central nervous system. GAD1 has been shown to interact with GAD2. Affected individuals manifest symmetrical, non-progressive spasticity and no adverse perinatal history or obvious underlying alternative diagnosis.

#### **Human CellExp GAD1, human recombinant protein - References**

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