

## 32-2342: GAD1 Recombinant Protein

**Alternative Name :** Glutamate Decarboxylase 1 (Brain,67kDa),GAD,Glutamate Decarboxylase 67 KDa Isoform,67 KDa Glutamic Acid Decarboxylase,GAD-67,EC 4.1.1.15,CPSQ1,SCP,Glutamate Decarboxylase 1 (Brain,67kD),Glutamate Decarboxylase 1,GAD67,EC 4.1.1,GAD1.

### Description

Source : E.coli. GAD1 Human Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 247 amino acids (1-224) and having a molecular mass of 27.7kDa.GAD1 is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques. Glutamate Decarboxylase 1 (GAD1) is one of several forms of glutamic acid decarboxylase, known as a key autoantigen in insulin-dependent diabetes. GAD1 is responsible for catalyzing the production of gamma-aminobutyric acid from L-glutamic acid. A pathogenic role for the GAD1 enzyme has been identified in the human pancreas since it has been detected as an autoantigen and an autoreactive T cell target in insulin-dependent diabetes. The GAD1 protein may also have a role in the stiff man syndrome. GAD1 enzyme deficiency leads to pyridoxine dependency with seizures. GAD1 also catalyzes the production of GABA.

### Product Info

**Amount :** 10 µg

**Purification :** Greater than 85% as determined by SDS-PAGE.

**Content :** The GAD1 solution (0.5mg/ml) contains 20mM Tris-HCl buffer (pH8.0), 10% glycerol and 0.4M Urea.

**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Avoid multiple freeze-thaw cycles.

**Amino Acid :** MGSSHHHHHH SGLVPRGSH MGSMASSTPS SSATSSNAGA DPNTTNLRPT TYDTWCGVAH  
GCTRKLGSKI CGFLQRTNSL EEKSRLVSAF KERQSSKNLL SCENSDRDAR FRRRTETDFSN  
LFARDLLPAK NGEEQTVQFL LEVVDILLNY VRKTFDRSTK VLDFHHPHQL LEGMEGFNLE  
LSDHPESLEQ ILVDCRDTLK YGVRTGHPRF FNQLSTGLDI IGLAGEWLTS TANTNMPSDM  
RECWLLR.

