## 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 27.7 kDa .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 : <br> $10 \mu \mathrm{~g}$

Purification :
Content :

Storage condition :

Amino Acid :

Greater than $85 \%$ as determined by SDS-PAGE.
The GAD1 solution ( $0.5 \mathrm{mg} / \mathrm{ml}$ ) contains 20 mM Tris-HCI buffer (pH8.0), $10 \%$ glycerol and 0.4 M Urea.
Store at $4^{\circ} \mathrm{C}$ if entire vial will be used within $2-4$ weeks. Store, frozen at $-20^{\circ} \mathrm{C}$ 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.

MGSSHHHHHH SSGLVPRGSH MGSMASSTPS SSATSSNAGA DPNTTNLRPT TYDTWCGVAH GCTRKLGLKI CGFLQRTNSL EEKSRLVSAF KERQSSKNLL SCENSDRDAR FRRTETDFSN LFARDLLPAK NGEEQTVQFL LEVVDILLNY VRKTFDRSTK VLDFHHPHQL LEGMEGFNLE LSDHPESLEQ ILVDCRDTLK YGVRTGHPRF FNQLSTGLDI IGLAGEWLTS TANTNMPSDM RECWLLR.


