

GAD1, human recombinant

CATALOG NO: P1153-10 10 µg
P1153-50 50 µg

ALTERNATE NAMES: CPSQ1, GAD, SCP, Glutamate decarboxylase 1

CONCENTRATION: 0.5 mg/ml (determined by Bradford assay)

SOURCE: GAD1 recombinant protein was expressed in *E.coli* and fused to His-tag at N-terminus (1-594aa)

PURITY: > 80% by SDS-PAGE

MOL. WEIGHT: This protein is fused with 6x His tag at N terminus and the protein has a calculated MW of 69.3 kDa (617aa)

FORM: Liquid

FORMULATION: In 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol

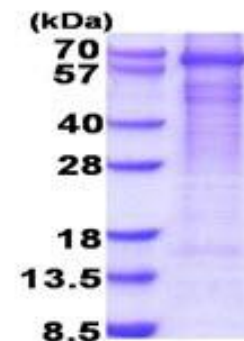
STORAGE CONDITIONS: Store at +4°C for short term (1-2 weeks). For long term storage, aliquot and store at -70°C. Avoid repeated freeze/thaw cycles.

SEQUENCE:

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MGSSHHHHHH SGLVPRGSH MGSMASSTPS SSATSSNAGA
DPNTTTLRPT TYDTWCGVAH GCTRKLGLKI CGFLQRTNSL
EEKSRLVSAF KERQSSKNLL SCENSRRDAR FRRTEPDFSN
LFARDLLPAK NGEEQTVQFL LEVVDILLNY VRKTFDRSTK
VLDFHHPHQL LEGMEGFNLE LSDHPESLEQ ILVDCRDTLK
YGVRTGHPRF FNQLSTGLDI IGLAGEWLTS TANTNMFTYE
IAPVFLMEQ ITLKKMREIV GWSSKDDGDI FSPGGAISNM
YSIMAARYKY FPEVKTKGMA AVPKLVLFST EQSHYSIKKA
GAALGFQTDN VILIKCNERG KIIPADFEAK ILEAKQKGYV
PFYVNATAGT TVYGAFDPIQ EIADICEKYN LWLHVDAAWG
GGLLMSRKHR HKLNGIERAN SVTWNPHKMM GVLLQCSAIL
VKEKGILQGC NQMCAGYLFQ PDKQYDVSVD TGDKAIQCGR
HVDIFKFWLM WKAKGTVGFE NQINKCLELA EYLYAKIKNR
EEFEMVFNGE PEHTNVCFWY IPQSLRGVPD SPQRREKLHK
VAPKIKALMM ESGTTMVGYY PQGDKANFFR MVISNPAATQ
SDIDFLIEEI ERLGQDL
    
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DESCRIPTION: This gene encodes one of several forms of glutamic acid decarboxylase, identified as a major autoantigen in insulin-dependent diabetes. The enzyme encoded 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. This protein may also play a role in the stiff man syndrome. Deficiency in this enzyme has been shown to lead to pyridoxine dependency with seizures. Recombinant human GAD1 protein, fused to His-tag at N-terminus, was expressed in *E.coli*.



15% SDS-PAGE (3µg)

Human recombinant GAD1

RELATED PRODUCT:

- CSTB, human recombinant (**Cat. No. 9235-10**)
- CST6, human recombinant (**Cat. No. 9234-10**)
- Cathepsin B, Active, human recombinant (**Cat. No. 7580-50**)
- Cathepsin D, Active, human recombinant (**Cat. No. 9229-50**)
- Cathepsin K, Active, human recombinant (**Cat. No. 7600-50**)
- Cathepsin L, human recombinant (**Cat. No. 1135-100**)
- Cathepsin S, Active, human recombinant (**Cat. No. 7526-50**)
- Human CellExp™ Cathepsin B, human recombinant (**Cat. No. 7408-10**)
- Human CellExp™ Cathepsin D, human recombinant (**Cat. No. 7409-10**)
- Human CellExp™ Cathepsin L1, human recombinant (**Cat. No. 7410-10**)
- Human CellExp™ Cathepsin S, human recombinant (**Cat. No. 7277-10**)
- Cathepsin D Activity Fluorometric Assay Kit (**Cat. No. K143-100**)
- Cathepsin B Activity Fluorometric Assay Kit (**Cat. No. K140-100**)

FOR RESEARCH USE ONLY! Not to be used on humans.