Recombinant Human GAD1GAD/GAD67 protein (His Tag)

Catalog Number: PDEH101044

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

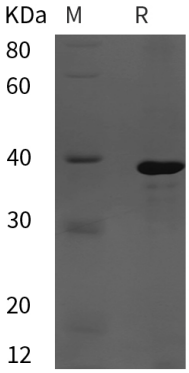
Description

Species	Human
Source	E.coli-derived Human GAD1GAD protein Met1-Try350, with an N-terminal His & C-terminal His
Calculated MW	38.4 kDa
Observed MW	39 kDa
Accession	Q99259-1
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Glutamate decarboxylase 1, also known as 67 kDa glutamic acid decarboxylase, Glutamate decarboxylase 67 kDa isoform and GAD1, 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 isoform ,3 is expressed in pancreatic islets, testis, adrenal cortex, and perhaps other endocrine tissues, but not in brain. Tissue-specific markers are useful for identification of tumour type in advanced cancers of unknown origin. In plants, as in most eukaryotes, glutamate decarboxylase catalyses the synthesis of GABA. Root-specific calcium/calmodulin-regulated GAD1 plays a major role in GABA synthesis in plants under normal growth conditions and in response to stress. 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. Affected individuals manifest symmetrical, no n-progressive spasticity and no adverse perinatal history or obvious underlying alternative diagnosis.