GAD65 Antibody (R30474)

Catalog No.	Formulation	Size
R30474	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	Q05329
Localization	Cytoplasmic, membranous
Applications	Western blot : 0.5-1ug/ml IHC (FFPE) : 0.5-1ug/ml
Limitations	This GAD65 antibody is available for research use only.
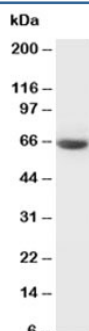
Western blot testing of GAD65 antibody and rat brain tissue lysate. Predicted molecular weight ~65 kDa.
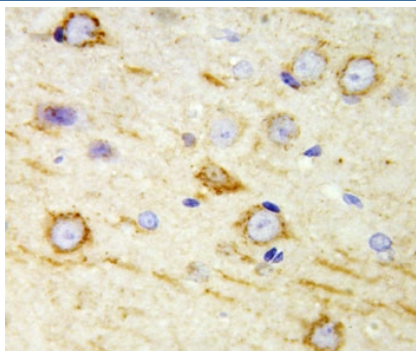
IHC-P: GAD65 antibody testing of rat brain tissue. Required HIER: steam section in pH6 citrate buffer for 20 min.

Description

Glutamate decarboxylase or glutamic acid decarboxylase is an enzyme that catalyzes the decarboxylation of glutamate to GABA and CO_2. GAD65 is the isoform with molecular weight of 65 kDa. Karlsen et al.(1991) mapped the GAD2 gene to chromosome 10p13-p11.2 by in situ hybridization. Bu et al.(1992) isolated a cDNA corresponding to the GAD2 gene from a human brain cDNA library. The deduced 585-amino acid protein has a molecular mass of 65 kD. GAD65 is a target of auto-antibodies in people who later develop type 1 diabetes mellitus or latent auto-immune diabetes.

Application Notes

The stated application concentrations are suggested starting points. Titration of the GAD65 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the N-terminus of the human protein (ENPGTARAWCQVAQKFT) was used as the immunogen for this GAD65 antibody (100% homologous in human, mouse and rat).

Storage

After reconstitution, the GAD65 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.