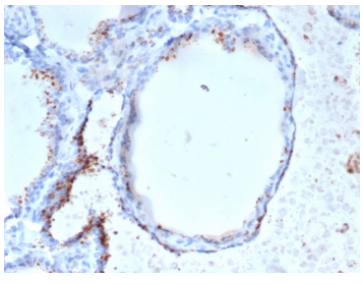
GAD65 Antibody / GAD2 [clone GAD2/6484] (V4087)

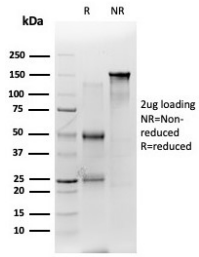
Catalog No.	Formulation	Size
V4087-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4087-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4087SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	GAD2/6484
Purity	Protein A/G affinity
UniProt	Q05329
Localization	Cytoplasm
Applications	ELISA (Order BSA-free format for coating) Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
Limitations	This GAD65 antibody is available for research use only.



GAD65 Antibody Thyroid IHC. Immunohistochemistry staining of FFPE human thyroid tissue with GAD2 (GAD65) antibody (clone GAD2/6484). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free GAD2 (GAD65) antibody (clone GAD2/6484) as confirmation of integrity and purity.

Description

This mAb recognizes a protein of 65kDa, which is identified as glutamic acid decarboxylase 2 (GDA2). It is responsible for catalyzing the production of gamma-aminobutyric acid from L-glutamic acid. There are two forms of glutamic acid decarboxylases (GAD s) that are found in the brain: GAD2 (also known as GAD65) and GAD1 (also known as GAD67). GAD1 and GAD2 are members of the group II decarboxylase family of proteins and are responsible for catalyzing the rate-limiting step in the production of GABA (gamma-aminobutyric acid) from L-glutamic acid. Although both GAD s are found in the brain, GAD2 localizes to synaptic vesicle membranes in nerve terminals, while GAD1 is distributed throughout the cell. A pathogenic role for GAD2 is identified in the human pancreas since it has been identified as an autoantibody and an auto-reactive T cell target in insulin-dependent diabetes.

For highly specific detection of GAD65 in inhibitory synaptic signaling studies, see our GAD65 Antibody / Synaptic GABA Marker Antibody page featuring clone GAD2/2362 with strong HuProt(TM) microarray specificity validation data.

Application Notes

Optimal dilution of the GAD65 antibody should be determined by the researcher.

Immunogen

A recombinant fragment of human GAD2/GAD65 protein (within amino acids 1-200) was used as the immunogen for the GAD65 antibody.

Storage

Aliquot the GAD65 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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