

GAD67 Conjugated Antibody

Catalog No: #C49484



Package Size: #C49484-AF350 100ul #C49484-AF405 100ul #C49484-AF488 100ul

#C49484-AF555 100ul #C49484-AF594 100ul #C49484-AF647 100ul

#C49484-AF680 100ul #C49484-AF750 100ul #C49484-Biotin 100ul

Orders: order@signalwayantibody.com

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Description

Product Name	GAD67 Conjugated Antibody
Host Species	Rabbit
Clonality	Monoclonal
Species Reactivity	Hu, Ms, Rt
Immunogen Description	recombinant protein
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	67 kDa glutamic acid decarboxylase antibody CPSQ1 antibody DCE1 antibody DCE1_HUMAN antibody EC 4.1.1.15 antibody FLJ45882 antibody GAD 67 antibody GAD antibody GAD-67 antibody GAD1 antibody Glutamate decarboxylase 1 (brain, 67kDa) antibody Glutamate decarboxylase 1 antibody Glutamate decarboxylase 1 brain 67kD antibody Glutamate decarboxylase 1 brain 67kDa antibody Glutamate decarboxylase 67 kDa isoform antibody Glutamate decarboxylase, brain, 67-KD antibody OTTHUMP00000041055 antibody SCP antibody
Accession No.	Swiss-Prot#:Q99259
Uniprot	Q99259
GeneID	2571;
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Calculated MW	67 kDa
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

Application Details

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

Background

There are two forms of glutamic acid decarboxylases (GADs) that are found in the brain: GAD-65 (also known as GAD2) and GAD-67 (also known as GAD1, GAD or SCP). GAD-65 and GAD-67 are members of the group II decarboxylase family of proteins and are responsible for catalyzing the rate limiting step in the production of GABA (g-aminobutyric acid) from L-glutamic acid. Although both GADs are found in the brain, GAD-65 localizes to synaptic vesicle membranes in nerve terminals, while GAD-67 is distributed throughout the cell. GAD-67 is responsible for the basal levels of GABA synthesis. In the case of a heightened demand for GABA in neurotransmission, GAD-65 will transiently activate to assist in GABA production. The loss of GAD-65 is detrimental and can impair GABA neurotransmission, however the loss of GAD-67 is lethal. Due to alternative splicing, two isoforms exist for GAD-67, the predominant GAD-67 form and the minor GAD-25 form. GAD-25 is not expressed in brain but can be found in a variety of endocrine tissues.

Note: This product is for in vitro research use only