



# Rabbit Anti-gad1b monoclonal antibody, clone KN22-22 (CABT-L935)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Target</b>	GAD67
<b>Immunogen</b>	Recombinant protein
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human, Mouse, Rat
<b>Clone</b>	KN22-22
<b>Purification</b>	Protein A purified.
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB, IP
<b>Cellular Localization</b>	Cytoplasm.
<b>Positive Control</b>	Hela.
<b>Format</b>	Liquid
<b>Size</b>	100 µl
<b>Buffer</b>	1×TBS (pH7.4), 1% BSA, 40% Glycerol.
<b>Preservative</b>	0.05% Sodium Azide
<b>Storage</b>	Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw

## BACKGROUND

### Introduction

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.

### Keywords

67 kDa glutamic acid decarboxylase;CPSQ1;DCE1;DCE1\_HUMAN;EC 4.1.1.15;FLJ45882;GAD 67;GAD;GAD-67;GAD1;Glutamate decarboxylase 1 (brain, 67kDa);Glutamate decarboxylase 1;Glutamate decarboxylase 1 brain 67kD;Glutamate decarboxylase 1 brain 67kDa;Glutamate decarboxylase 67 kDa isoform;Glutamate decarboxylase, brain, 67-KD;OTTHUMP00000041055;SCP antibody

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