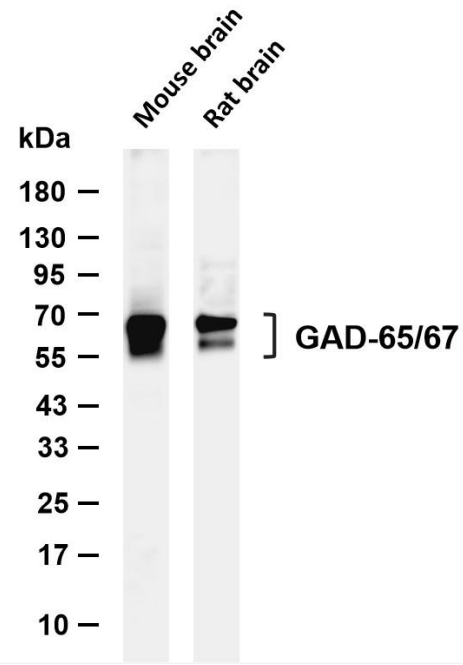
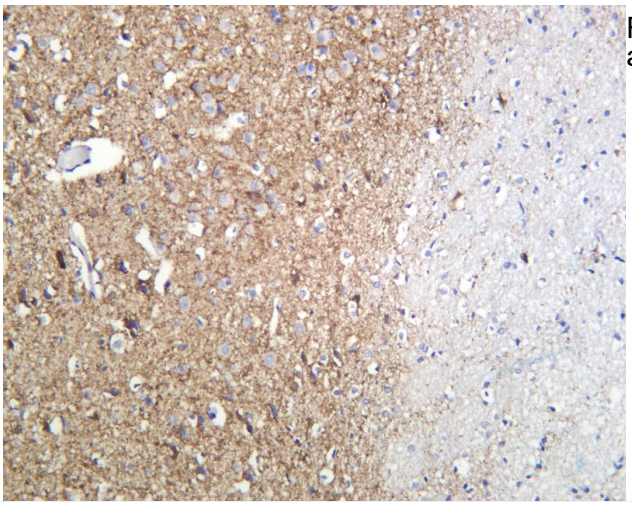
GAD-65/67 Rabbit mAb

Catalog No	YP-rAb-17405
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,IP,ELISA
Gene Name	GAD1/GAD2
Protein Name	Glutamate decarboxylase 1/2
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1:1000; WB 1:10000-1:50000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	GAD1 ; GAD ; GAD67 ; Glutamate decarboxylase 1 ; 67 kDa glutamic acid decarboxylase ; GAD-67 ; Glutamate decarboxylase 67 kDa isoform ; GAD2 ; GAD65 ; Glutamate decarboxylase 2 ; 65 kDa glutamic acid decarboxylase ; GAD-65 ; Glutamate decarboxylase 65
Observed Band	65kD,67kD
Calculated Molecular Weight	65kD,67kD
Cell Pathway	intracellular,plasma membrane,vesicle membrane,presynaptic active zone,clathrin-sculpted gamma-aminobutyric acid transport vesicle membrane,
Tissue Specificity	[Isoform 1]: Expressed in brain. ; [Isoform 3]: Expressed in pancreatic islets, testis, adrenal cortex, and perhaps other endocrine tissues, but not in brain.
Function	Catalytic activity:L-glutamate = 4-aminobutanoate + CO(2).,cofactor:Pyridoxal phosphate.,Disease:Defects in GAD1 are the cause of autosomal recessive symmetric spastic cerebral palsy (SCP) [MIM:603513]. Cerebral palsy (CP) is an heterogeneous group of neurological disorders of movement and/or posture, with an estimated incidence of 1 in 250 to 1'000 live births, making CP one the commonest congenital disabilities. Non-progressive forms of symmetrical, spastic CP have been identified, which show a Mendelian autosomal recessive pattern of inheritance. Patients present developmental delay, mental retardation and

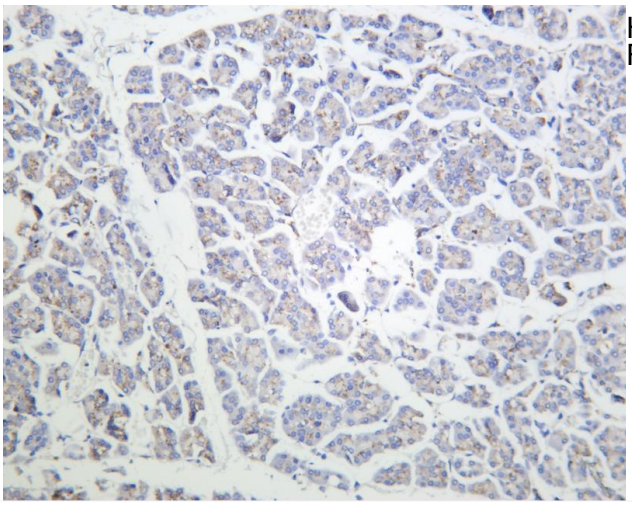
	sometimes epilepsy as part of the phenotype.,Function:Catalyzes the production of GABA.,online information:Glutamate decarboxylase entry,similarity:Belongs to the group II decarboxylase family.,subunit:Homodimer.,tissue specificity:Isoform 3 is expressed in pancreatic islets, testis, adrenal cortex, and perhaps other endocrine tissues, but not in brain.,
Background	glutamate decarboxylase 1(GAD1) Homo sapiens This gene encodes one of several forms of glutamic acid decarboxylase, identified as a major autoantigen in insulin-dependent diabetes. The enzyme encoded is responsible for catalyzing the production of gamma-aminobutyric acid from L-glutamic acid. A pathogenic role for this enzyme has been identified in the human pancreas since it has been identified as an autoantigen and an autoreactive T cell target in insulin-dependent diabetes. This gene may also play a role in the stiff man syndrome. Deficiency in this enzyme has been shown to lead to pyridoxine dependency with seizures. Alternative splicing of this gene results in two products, the predominant 67-kD form and a less-frequent 25-kD form. [provided by RefSeq, Jul 2008],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



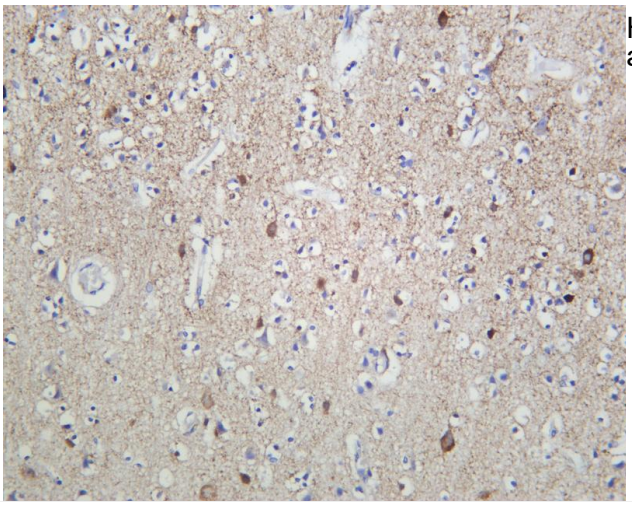
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-GAD-65/67 antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: Mouse brain Lane 2: Rat brain Predicted band size: 65,67kDa Observed band size: 65,67kDa



Rat brain was stained with anti-GAD-65/67 Rabbit antibody



Human pancreas was stained with anti-GAD-65/67 Rabbit antibody



Human brain was stained with anti-GAD-65/67 Rabbit antibody