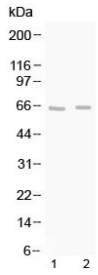
GAD65 Antibody (R32760)

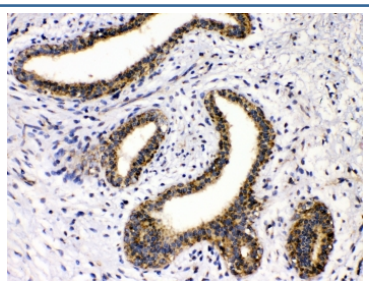
Catalog No.	Formulation	Size
R32760	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

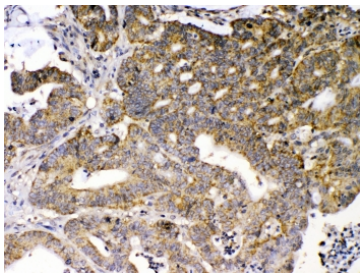
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA, 0.025% sodium azide
UniProt	Q05329
Localization	Cytoplasmic, membranous
Applications	Western Blot : 0.5-1ug/ml IHC (FFPE) : 1-2ug/ml
Limitations	This GAD65 antibody is available for research use only.



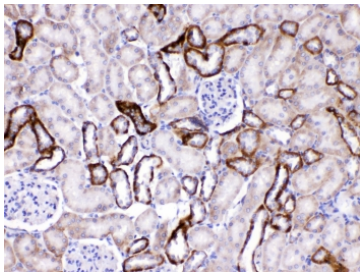
Western blot testing of 1) rat brain and 2) mouse brain lysate with GAD65 antibody at 0.5ug/ml. Predicted molecular weight ~65 kDa.



IHC testing of FFPE human breast cancer tissue with GAD65 antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



IHC testing of FFPE human intestinal cancer tissue with GAD65 antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



IHC testing of FFPE rat kidney tissue with GAD65 antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.

Description

Glutamate decarboxylase 2, also known as GAD65, is an enzyme that in humans is encoded by the GAD2 gene. 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 autoantibody and an autoreactive T cell target in insulin-dependent diabetes. This gene may also play a role in the stiff man syndrome. Alternative splicing results in multiple transcript variants that encode the same protein.

Application Notes

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

Immunogen

Amino acids 131-164 (KVIDFHYPNELLQEYNWELADQPQNLEEILMHCQ) from the human protein were used as the immunogen for the GAD65 antibody.

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.