SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-GAD65 antibody

SL0325R

Product Name	GAD65
Chinese Name	谷氨酸脱羧酶-65 抗体
Alias	65 kDa glutamic acid decarboxylase; DCE 2; DCE2; GAD 2; GAD 65; GAD-2; GAD-65; GAD2; Glutamate Decarboxylase 2 (pancreatic islets and brain 65kDa); Glutamate Decarboxylase 2; Glutamate Decarboxylase 65; Glutamate decarboxylase 65 kDa isoform; Glutamic Acid Decarboxylase 2; Glutamic Acid Decarboxylase 65.
Research Area	immunology Diabetes
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human, Mouse, Rat,
Applications	WB=1:500-2000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	65kDa
Cellular localization	cytoplasmic The cell membrane
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human GAD65: 501-585/585
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed

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. [provided by RefSeq, Oct 2008]

Product Detail

Function:
Catalyzes the production of GABA.

Subunit:
Homodimer.

Subcellular Location:
Cytoplasm, cytosol. Cytoplasmic vesicle. Cell junction, synapse, presynaptic cell membrane; Lipid-anchor. Golgi apparatus membrane; Peripheral membrane protein; Cytoplasmic side. Note=Associated to cytoplasmic vesicles. In neurons, cytosolic leaflet of Golgi membranes and presynaptic clusters.

Post-translational modifications:
Phosphorylated; which does not affect kinetic parameters or subcellular location. Palmitoylated; which is required for presynaptic clustering.

Similarity:
Belongs to the group II decarboxylase family.

SWISS:
Q05329

Gene ID:
2572

Database links:

Entrez Gene: 2572 Human

Entrez Gene: 14417 Mouse

Entrez Gene: 24380 Rat

SwissProt: Q05329 Human

SwissProt: P48320 Mouse

SwissProt: Q05683 Rat

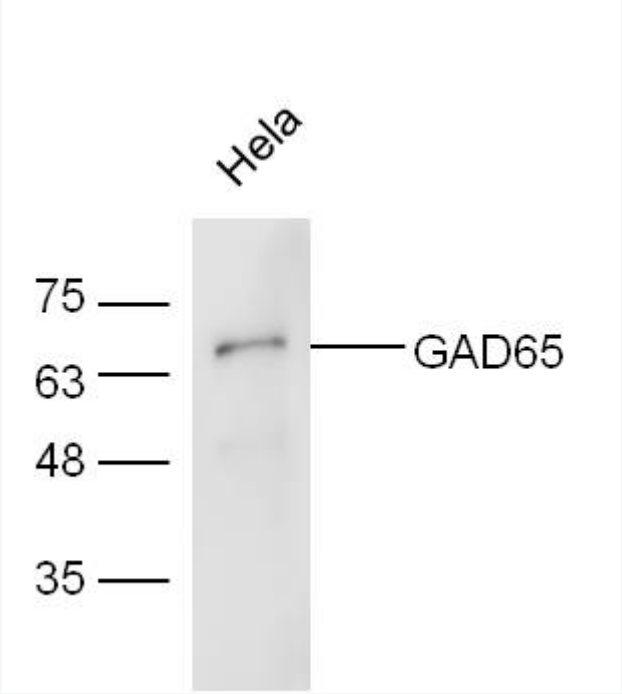
Unigene: 231829 Human

Unigene: 4784 Mouse

Unigene: 29951 Rat

谷氨酸脱羧酶-65(GAD65)是用于 I II 型 Diabetes 研究的很重要的蛋白。

Product Picture



Sample: Hela Cell Lysate at 40 ug

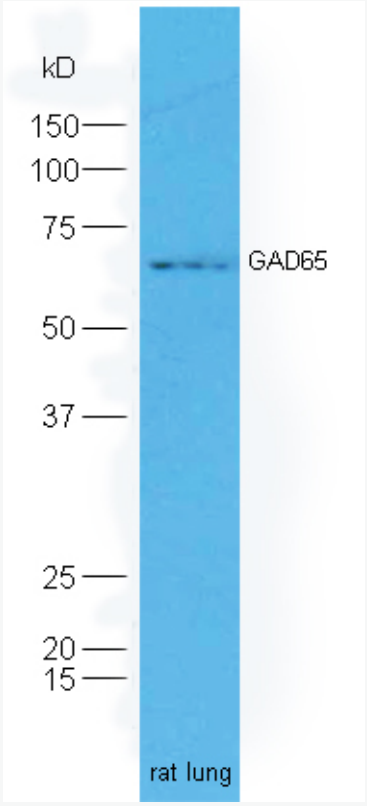
Primary: Anti- GAD65 (SL0325R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/10000 dilution

Predicted band size: 65 kD

SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Observed band size: 65 kD



Sample: Lung(Rat) lysate at 30 ug;

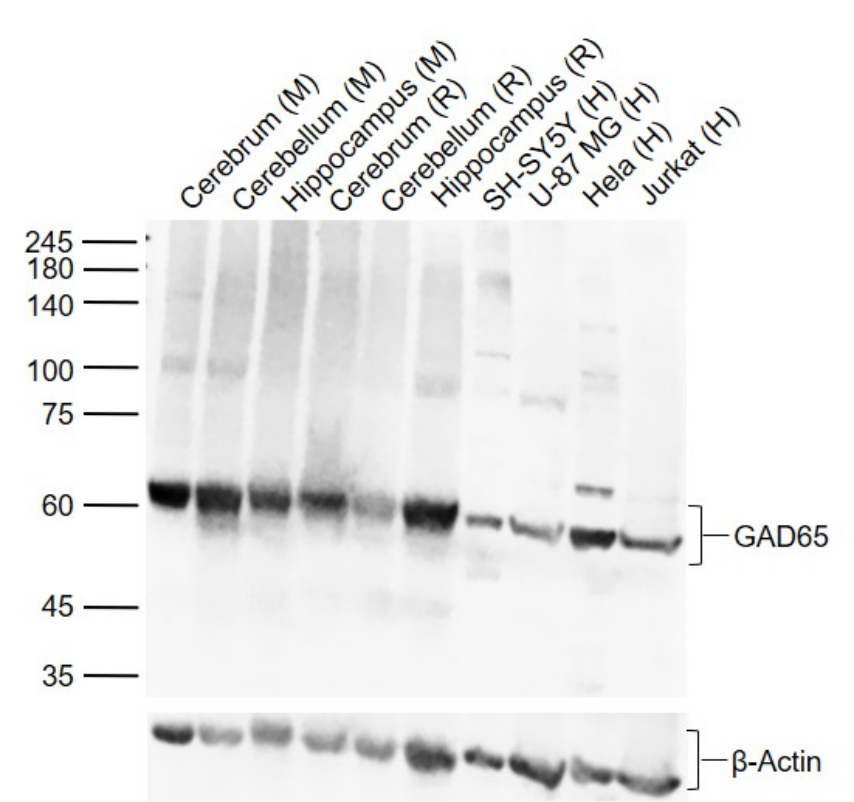
Primary: Anti-GAD65 (SL0325R) at 1:300 dilution;

Secondary: HRP conjugated Goat Anti-Rabbit IgG(SL0295G-HRP) at 1: 5000 dilution;

Predicted band size : 65kD

Observed band size : 65kD

SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com



Sample:

Lane 1: Mouse Cerebrum tissue lysates

Lane 2: Mouse Cerebellum tissue lysates

Lane 3: Mouse Hippocampus tissue lysates

Lane 4: Rat Cerebrum tissue lysates

Lane 5: Rat Cerebellum tissue lysates

Lane 6: Rat Hippocampus tissue lysates

Lane 7: Human SH-SY5Y cell lysates

Lane 8: Human U-87 MG cell lysates

Lane 9: Human Hela cell lysates

SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

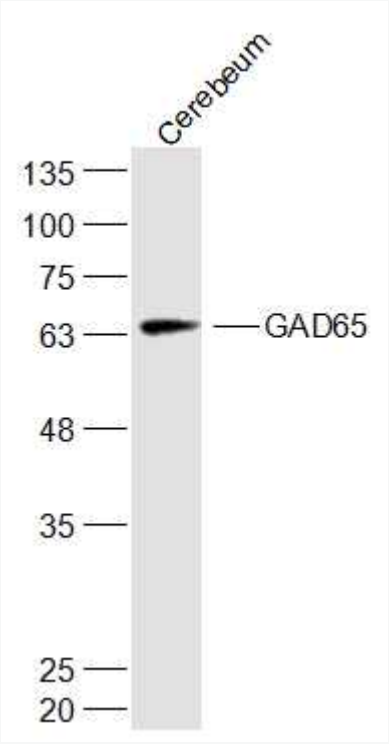
Lane 10: Human Jurkat cell lysates

Primary: Anti-GAD65 (SL0325R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 65 kDa

Observed band size: 62 kDa



Sample:

Cerebrum (Mouse) Lysate at 40 ug

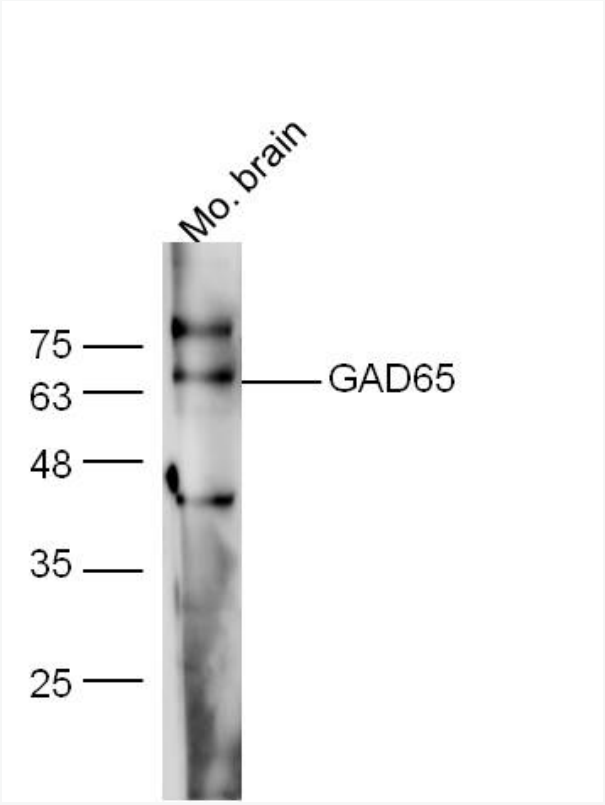
Primary: Anti-GAD65 (SL0325R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 65 kD

SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Observed band size: 65 kD



Sample:

brain (Mouse) Lysate at 40 ug

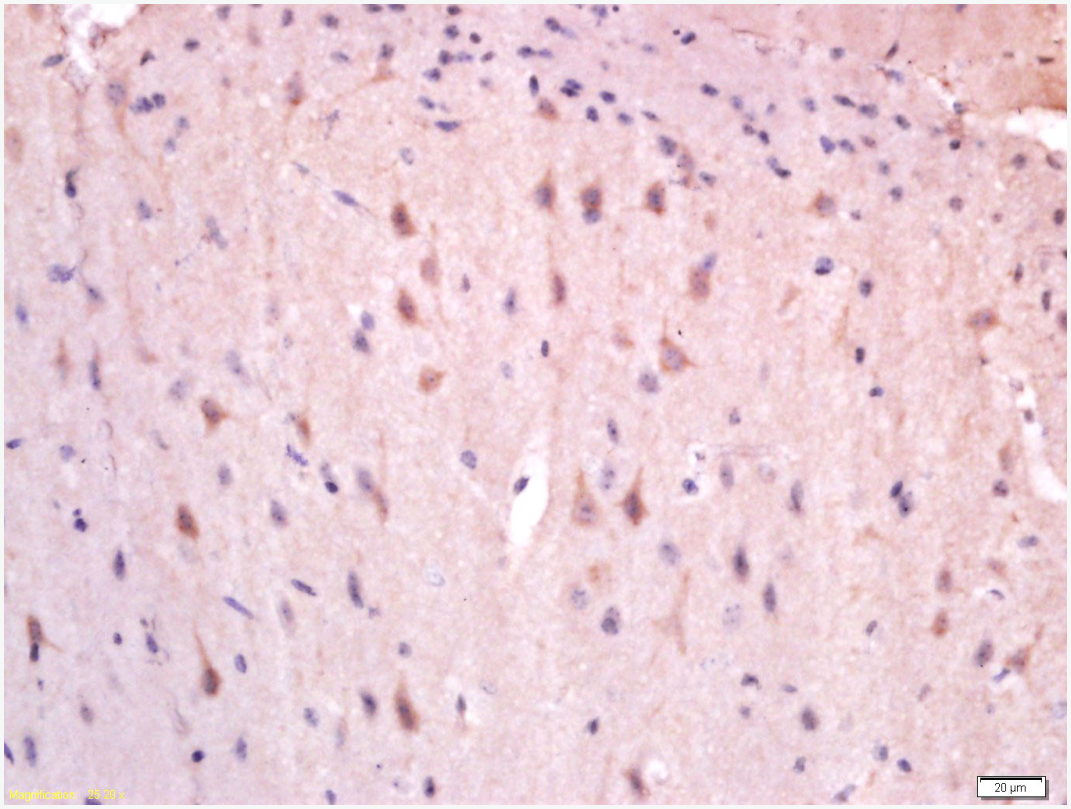
Primary: Anti-GAD65 (SL0325R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 65 kD

Observed band size: 65 kD

SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

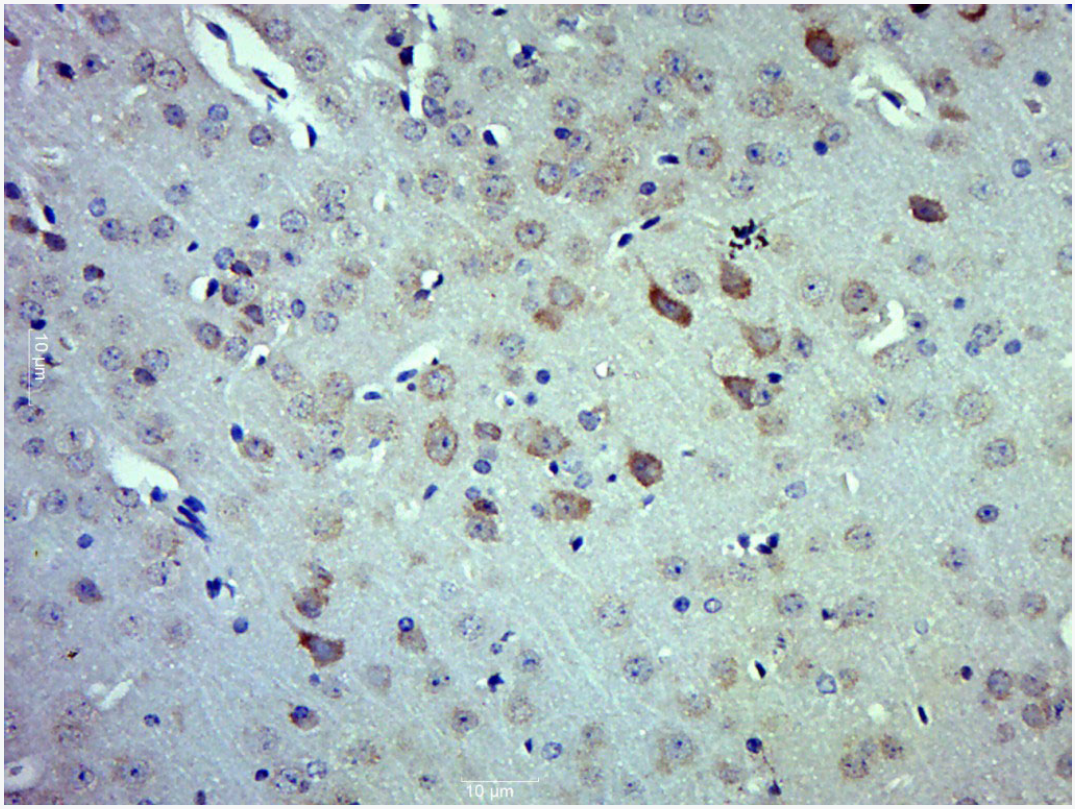


Tissue/cell: mouse brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

Incubation: Anti-GAD65 Polyclonal Antibody, Unconjugated(SL0325R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GAD65) Polyclonal Antibody, Unconjugated (SL0325R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.