Product datasheet

Anti-GAD65/GAD2 Antibody (Clone#7G2)

Catalog Number: *M03142*

BOSTER
antibody and ELISA experts
BOSTER BIOLOGICAL TECHNOLOGY
Building C21, 3rd to 5th Floors, Optics Valley Biopharmaceutical Accelerator,
East Lake High-Tech Development Zone, Wuhan.
Web: www.boster.com ***Phone:*** 027-67845390/1/2 ***Email:*** boster@boster.com

Basic Information

Product Name	Anti-GAD65/GAD2 Antibody (Clone#7G2)
Gene Name	GAD2
Source	Mouse
Clonality	Monoclonal
Isotype	IgG2a
Species Reactivity	human, mouse, rat
Tested Application	WB, IHC, ICC/IF, FCM
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human GAD65, different from the related mouse and rat sequences by one amino acid.
Concentration	500 ug/ml
Purification	protein G purified.
Observed MW	65 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF):1:50-400 Flow Cytometry (Fixed): 1:50-200

Storage

12 months from date of receipt，-20℃ as supplied.

Background Information

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.

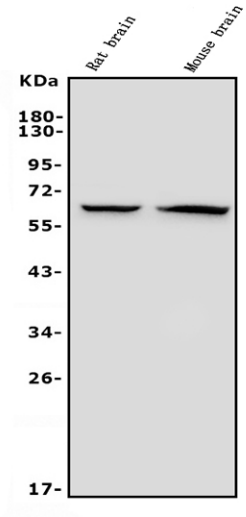
Selected Validation Data

Product datasheet

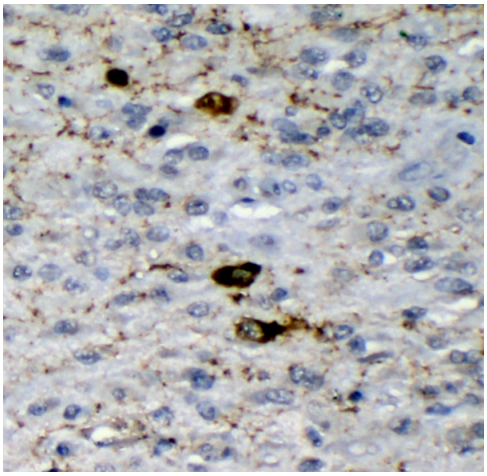
Anti-GAD65/GAD2 Antibody (Clone#7G2)

Catalog Number: *M03142*

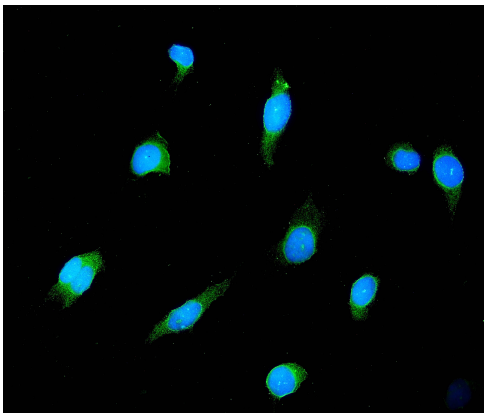
BOSTER
antibody and ELISA experts
BOSTER BIOLOGICAL TECHNOLOGY
Building C21, 3rd to 5th Floors, Optics Valley Biopharmaceutical Accelerator,
East Lake High-Tech Development Zone, Wuhan.
Web: www.boster.com ***Phone:*** 027-67845390/1/2 ***Email:*** boster@boster.com



Western blot analysis of GAD65/GAD2 using anti-GAD65/GAD2 antibody (M03142). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: rat brain tissue lysates,
Lane 2: mouse brain tissue lysates.
After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-GAD65/GAD2 antigen affinity purified monoclonal antibody (M03142) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for GAD65/GAD2 at approximately 65 kDa. The expected band size for GAD65/GAD2 is at 65 kDa.



IHC analysis of GAD65/GAD2 using anti-GAD65/GAD2 antibody (M03142). GAD65/GAD2 was detected in a paraffin-embedded section of human glioma tissue. Biotinylated goat anti-mouse IgG was used as secondary antibody. The tissue section was incubated with mouse anti-GAD65/GAD2 Antibody (M03142) at a dilution of 1:200 and developed using Strepavidin-Biotin-Complex (SABC) (Catalog # SA1021) with DAB (Catalog # AR1027) as the chromogen.



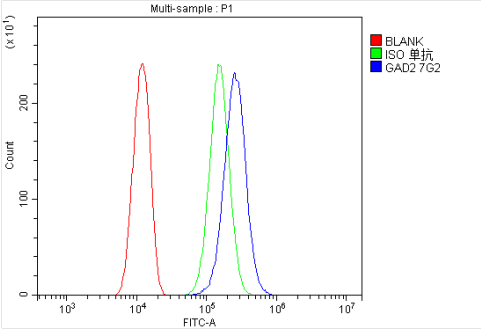
IF analysis of GAD65/GAD2 using anti-GAD65/GAD2 antibody (M03142). GAD65/GAD2 was detected in an immunocytochemical section of Hela cells. The section was incubated with mouse anti-GAD65/GAD2 Antibody (M03142) at a dilution of 1:100. Dylight488-conjugated Anti-mouse IgG Secondary Antibody (green)(Catalog#BA1126) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).

Product datasheet

Anti-GAD65/GAD2 Antibody (Clone#7G2)

Catalog Number: *M03142*

antibody and ELISA experts
BOSTER BIOLOGICAL TECHNOLOGY
Building C21, 3rd to 5th Floors, Optics Valley Biopharmaceutical Accelerator,
East Lake High-Tech Development Zone, Wuhan.
Web: www.boster.com ***Phone:*** 027-67845390/1/2 ***Email:*** boster@boster.com



Flow Cytometry analysis of U2OS cells using anti-GAD65/GAD2 antibody (M03142).

Overlay histogram showing U2OS cells stained with M03142 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-GAD65/GAD2 Antibody (M03142) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.