

Technical Data Sheet

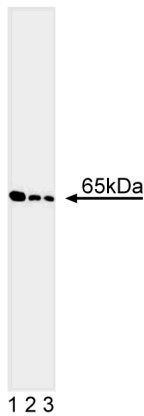
Purified Mouse Anti-GAD65

Product Information

Material Number:	559931
Alternate Name:	Glutamic acid decarboxylase
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	GAD-6
Immunogen:	Purified Rat GAD65
Isotype:	Mouse IgG2a
Reactivity:	QC Testing: Rat Tested in Development: Human, Mouse, Pig
Target MW:	65 kDa
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

γ-aminobutyric acid (GABA) is an amino acid neurotransmitter that is considered to be the major inhibitory neurotransmitter in the mammalian central nervous system. The highest concentrations of GABA are found in the brain, where it is synthesized from glutamic acid to GABA by an enzyme called glutamic acid decarboxylase (GAD). GAD is also expressed in the insulin-producing β cells of the islets of Langerhans. Two isoforms of GAD are present in rat brain, GAD65 and GAD67, based on their relative molecular weight in kDa. Both isoforms have significant levels of homology in the catalytic portion of the molecule, but differ greatly in the first 95 amino acids in the N-terminal region. GAD65 migrates at ~65 kDa in SDS/PAGE. The antibody is reported to recognize rat, human, mouse, and pig GAD65. Purified GAD65 from rat brain was used as the immunogen. The specific epitope recognized by this clone is a linear epitope localized in the last 41 amino acids of GAD65.



Western blot analysis of GAD65. Lysates from rat brain cortex were probed with purified anti-GAD65 (clone GAD-6) at a concentration of 5.0 (lane 1), 2.0 (lane 2) or 0.5 μg/ml (lane 3). GAD65 is identified as a protein of ~65 kDa.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at 4° C.

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Application Notes

Application

Western blot	Routinely Tested
Immunohistochemistry-frozen	Reported
Immunoprecipitation	Reported

Recommended Assay Procedure:

Rat brain cortex is recommended as a positive control for western blot

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

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