

GAD 1 / GAD 67

Cat.No. 198 211; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg purified IgG, lyophilized. Azide was added before lyophilization. For reconstitution add 100 µl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 (AP staining) IP: not tested yet ICC: 1 : 500 up to 1 : 1000 IHC: 1 : 500 IHC-P/FFPE: 1 : 1000
Clone	126G12
Subtype	IgG2b (κ light chain)
Immunogen	Recombinant protein corresponding to AA 3 to 101 from mouse GAD1 (UniProt Id: P48318)
Epitop	Epitop: AA 3 to 101 from mouse GAD1 (UniProt Id: P48318)
Reactivity	Reacts with: mouse (P48318), rat (P18088). Other species not tested yet.
Specificity	Specific for GAD 1 / GAD67.
Remarks	This antibody is highly recommended for Western blot and IF.

TO BE USED IN VITRO / FOR RESEARCH ONLY NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

The **glutamic acid decarboxylases GAD 1**, also referred to as **GAD 67**, and **GAD 2 / GAD 65** synthesize γ-aminobutyric acid (GABA), the major inhibitory neurotransmitter in the central nervous system. The hydrophilic GAD 1 can heterodimerize with the membrane anchored GAD 2 and part of GAD 1 is targeted to inhibitory nerve terminals by this mechanisms. Although both proteins exhibit significant differences in their N-terminus they share high homology in the rest of the molecule. GADs are widely used markers for the GABAergic system. In type 1 diabetes GAD 1 has been identified as a major autoantigen.

Selected General References

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Glutamate decarboxylases in nonneural cells of rat testis and oviduct: differential expression of GAD65 and GAD67.

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