

Ca²⁺ channel N-type, α -1B subunit

Cat.No. 152 311; Monoclonal mouse antibody, 100 μ g purified IgG (lyophilized)

Data Sheet

Reconstitution/ Storage	100 μ g purified IgG, lyophilized. Azide was added before lyophilization. For reconstitution add 100 μ l 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) (see remarks) IP: not tested yet ICC: not tested yet IHC: not tested yet IHC-P/FFPE: not tested yet
Clone	163E3
Subtype	IgG2b (κ light chain)
Immunogen	Recombinant protein corresponding to AA 2056 to 2336 from rat Ca ²⁺ channel N-type α -1B (UniProt Id: Q02294)
Epitop	Epitop: AA 2074 to 2354 from rat Ca ²⁺ channel N-type α -1B (UniProt Id: Q02294)
Reactivity	Reacts with: rat, mouse. Other species not tested yet.
Specificity	Specific for Ca ²⁺ channel α -1B.
matching control	152-3P
Remarks	WB: Due to its large size, this antibody requires special gel-electrophoresis and Western blot protocols for visualization by immunoblotting. Excellent results can be obtained with the 4-12% TRIS-glycine gradient gels of anamed or NuPage TRIS-acetate gels from Invitrogen. This protein tends to aggregate after boiling, making it necessary to run SDS-PAGE with non-boiled samples.

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

Voltage gated calcium channels (VGCCs), also referred to as voltage sensitive calcium channels (VSCCs), are present in most excitable cells. They mediate the influx of Ca²⁺ ions into the cell and trigger the release of neurotransmitters or hormones but are also involved in other calcium dependent processes like metabolism, cell proliferation and cell death.

VGCCs are composed of four subunits (α -1, α -2, β and δ) in a 1:1:1:1 ratio. The α -1A isoform occurs in VGCCs of the P/Q-type while isoform α -1B is found in the **N-type**. Both belong to the high voltage activated group (hva).

Selected General References

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