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Ca2+ channel R-type, a-1E subunit

Cat.No. 152 411; 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_2O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: 1 : 500 up to 1 : 1000 (AP staining) (see remarks) IP: not tested yet ICC: 1 : 500 IHC: not tested yet IHC-P/FFPE: not tested yet
Clone	62C10
Subtype	IgG2b (κ light chain)
Immunogen	Recombinant protein corresponding to AA 1921 to 2222 from rat Ca2+ channel R- type a-1E (UniProt Id: Q07652)
Reactivity	Reacts with: rat, mouse. Other species not tested yet.
Specificity	Specific for Ca ²⁺ channel α-1Ε.
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 **g**ated **c**alcium **c**hannels (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 hormons 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 -1E isoform occurs in VGCCs of the **R**-type which belongs to the high voltage activated group (hva).

Selected General References

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