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Anti-Kv3.1 Antibody

Catalog # AP51297

Product Information

Application	WB, IHC
Primary Accession	P48547
Reactivity	Human, Mouse, Rat, Rabbit, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	57942

Additional Information

Gene ID	3746
Other Names	Potassium voltage-gated channel subfamily C member 1; NGK2; Voltage-gated potassium channel subunit Kv3.1; Voltage-gated potassium channel subunit Kv4
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Kv3.1. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

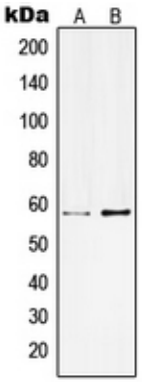
Name	KCNC1 {ECO:0000303|PubMed:8449507, ECO:0000312|HGNC:HGNC:6233}
Function	Voltage-gated potassium channel that opens in response to the voltage difference across the membrane and through which potassium ions pass in accordance with their electrochemical gradient (PubMed:25401298, PubMed:35840580). The mechanism is time-dependent and inactivation is slow (By similarity). Plays an important role in the rapid repolarization of fast-firing brain neurons (By similarity). Can form functional homotetrameric channels and heterotetrameric channels that contain variable proportions of KCNC2, and possibly other family members as well (By similarity). Contributes to fire sustained trains of very brief action potentials at high frequency in pallidal neurons (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein. Cell projection, axon {ECO:0000250|UniProtKB:P25122}. Presynaptic cell membrane {ECO:0000250|UniProtKB:P25122}. Note=Localizes in parallel fiber

membranes, distributed on the perisynaptic and extrasynaptic membranes away from the active zones. {ECO:0000250|UniProtKB:P25122}

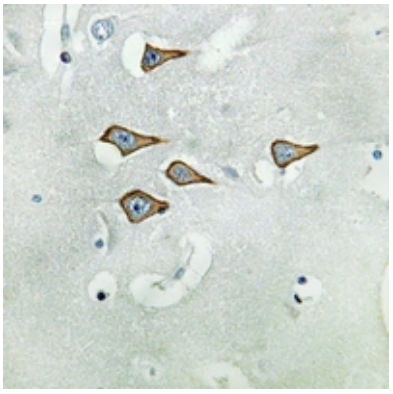
References

Ried T.,et al.Genomics 15:405-411(1993).
Grissmer S.,et al.J. Biol. Chem. 267:20971-20979(1992).

Images



Western blot analysis of Kv3.1 expression in HepG2 (A), rat brain (B) whole cell lysates. (Predicted band size: 57 kD; Observed band size: 58 kD)



Immunohistochemical analysis of Kv3.1 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.