10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Kv10.1 Antibody

Catalog # AP51821

Product Information

Application	WB
Primary Accession	O95259
Reactivity	Human, Mouse, Rat, Zebrafish, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	111423

Additional Information

Gene ID	3756
Other Names	EAG; EAG1; Potassium voltage-gated channel subfamily H member 1; Ether-a-go-go potassium channel 1; EAG channel 1; h-eag; hEAG1; Voltage-gated potassium channel subunit Kv10.1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Kv10.1. The exact sequence is proprietary.
Dilution	WB~~ 1:1000
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

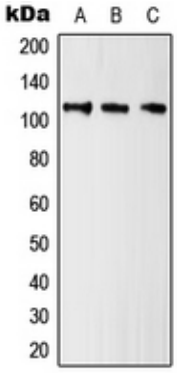
Name	KCNH1 (HGNC:6250)
Function	Pore-forming (alpha) subunit of a voltage-gated delayed rectifier potassium channel that mediates outward-rectifying potassium currents which, on depolarization, reaches a steady-state level and do not inactivate (PubMed:10880439, PubMed:11943152, PubMed:22732247, PubMed:25420144, PubMed:25556795, PubMed:25915598, PubMed:27005320, PubMed:27325704, PubMed:27618660, PubMed:30149017, PubMed:9738473). The activation kinetics depend on the prepulse potential and external divalent cation concentration (PubMed:11943152). With negative prepulses, the current activation is delayed and slowed down several fold, whereas more positive prepulses speed up activation (PubMed:11943152). The time course of activation is biphasic with a fast and a slowly activating current component (PubMed:11943152). Activates at more positive membrane potentials and exhibit a steeper activation curve (PubMed:11943152). Channel properties are

	modulated by subunit assembly (PubMed:11943152). Mediates IK(NI) current in myoblasts (PubMed:9738473). Involved in the regulation of cell proliferation and differentiation, in particular adipogenic and osteogenic differentiation in bone marrow-derived mesenchymal stem cells (MSCs) (PubMed:23881642).
Cellular Location	Cell membrane; Multi-pass membrane protein. Nucleus inner membrane; Multi-pass membrane protein. Cell projection, dendrite {ECO:0000250|UniProtKB:Q63472}. Cell projection, axon {ECO:0000250|UniProtKB:Q63472}. Presynaptic cell membrane {ECO:0000250|UniProtKB:Q63472}. Perikaryon {ECO:0000250|UniProtKB:Q63472}. Postsynaptic density membrane {ECO:0000250|UniProtKB:Q63472}. Early endosome membrane. Note=Perinuclear KCNH1 is located to NPC-free islands
Tissue Location	Highly expressed in brain and in myoblasts at the onset of fusion, but not in other tissues (PubMed:9738473). Detected in HeLa (cervical carcinoma), SH-SY5Y (neuroblastoma) and MCF-7 (epithelial tumor) cells, but not in normal epithelial cells

References

Occhiodoro T.,et al.FEBS Lett. 434:177-182(1998).
Pardo L.A.,et al.EMBO J. 18:5540-5547(1999).
Gregory S.G.,et al.Nature 441:315-321(2006).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Schoenherr R.,et al.EMBO J. 19:3263-3271(2000).

Images



Western blot analysis of Kv10.1 expression in HeLa (A), NIHC3T3 (B), H9C2 (C) whole cell lysates. (Predicted band size: 111 kD; Observed band size: 111 kD)

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