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KCNH1 Polyclonal Antibody

Catalog # AP70639

Product Information

Application	WB, E, IHC-P
Primary Accession	O95259
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	111423

Additional Information

Gene ID	3756
Other Names	KCNH1; 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
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications. E~~N/A IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

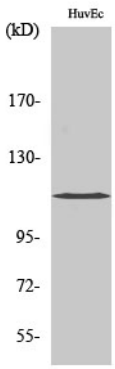
Name	KCNH1 (HGNC:6250)
Function	Pore-forming (alpha) subunit of a voltage-gated delayed rectifier potassium channel that mediates outward-rectifying potassium currents which, on depolarization, reaches a steady-state level and do not inactivate (PubMed:10880439, PubMed:11943152, PubMed:22732247, PubMed:25420144, 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

Background

Pore-forming (alpha) subunit of a voltage-gated delayed rectifier potassium channel (PubMed: 9738473, PubMed:11943152, PubMed:10880439, PubMed:22732247, PubMed:25556795, PubMed:27325704, PubMed:27005320, PubMed:27618660). 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).

Images



Western Blot analysis of various cells using KCNH1 Polyclonal Antibody diluted at 1：2000