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Kv10.1 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51821

Specification

Kv10.1 Antibody - Product Information

Application	**WB**
Primary Accession	O95259
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**111 KDa**
Antigen Region	**701 - 760**

Kv10.1 Antibody - Additional Information

Gene ID 3756

Other Names
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 Kv101, KCNH1, EAG, EAG1

Target/Specificity
KLH conjugated synthetic peptide derived from human Kv10.1

Dilution
WB~~ 1:1000

Format
0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage
Store at -20 °C.Stable for 12 months from date of receipt

Kv10.1 Antibody - 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:<a href="http://www.uniprot.org/citations/27005320"

target="_blank">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

Kv10.1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Kv10.1 Antibody - Images

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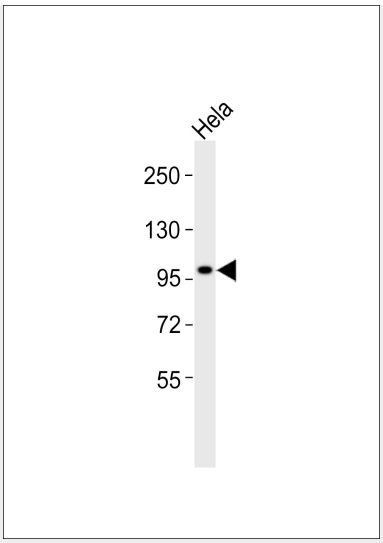

Anti-Kv10.1 Antibody at 1:1000 dilution + HeLa whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution Predicted band size : 111 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Kv10.1 Antibody - Background

Pore-forming (alpha) subunit of voltage-gated non- inactivating delayed rectifier potassium channel. Channel properties may be modulated by cAMP and subunit assembly. Mediates IK(NI) current in myoblasts.

Kv10.1 Antibody - 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).