

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 encompassing a sequence within the center region of human Kv10.1. The exact sequence is proprietary.

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](http://www.uniprot.org/citations/10880439), PubMed: [11943152](http://www.uniprot.org/citations/11943152), PubMed: [22732247](http://www.uniprot.org/citations/22732247), PubMed: [25420144](http://www.uniprot.org/citations/25420144), PubMed: [25556795](http://www.uniprot.org/citations/25556795), PubMed: [25915598](http://www.uniprot.org/citations/25915598))

target="_blank">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

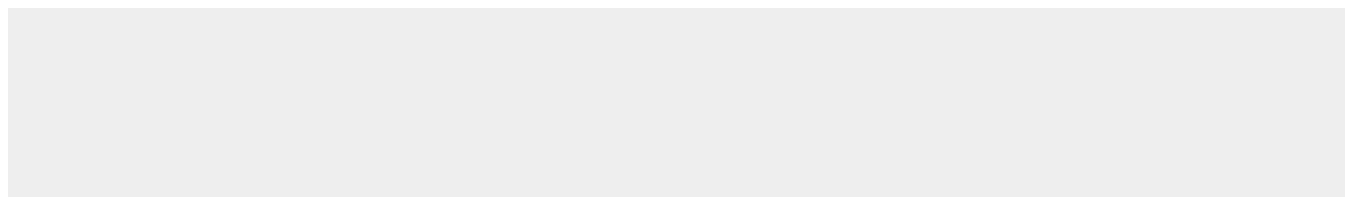
Highly expressed in brain and in myoblasts at the onset of fusion, but not in other tissues (PubMed:9738473). Detected in HeLa (cervical carcinoma), SH-SY5Y (neuroblastoma) and MCF-7 (epithelial tumor) cells, but not in normal epithelial cells

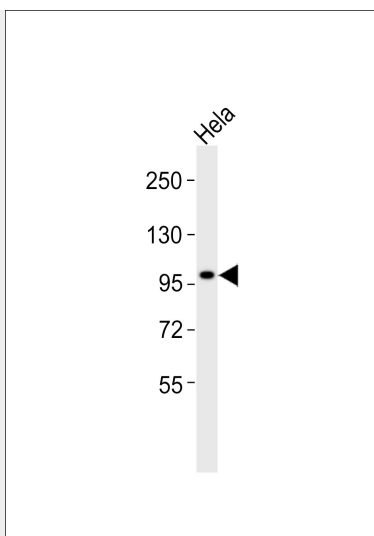
Kv10.1 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Kv10.1 Antibody - Images





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/DBJ databases.
Schoenherr R., et al. EMBO J. 19:3263-3271(2000).