

KCNH1 Antibody (C-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22343b

Specification

KCNH1 Antibody (C-Term) - Product Information

Application IF, WB, FC,E **Primary Accession** 095259 Reactivity Human Predicted Human Host Rabbit Clonality polyclonal Isotype Rabbit IgG Calculated MW 111423

KCNH1 Antibody (C-Term) - 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 Kv10.1, KCNH1, EAG, EAG1

Target/Specificity

This KCNH1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 787-820 amino acids from the human region of human KCNH1.

Dilution

IF~~1:25 WB~~1:2000 FC~~1:25

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

KCNH1 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

KCNH1 Antibody (C-Term) - Protein Information

Name KCNH1



Function 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).

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

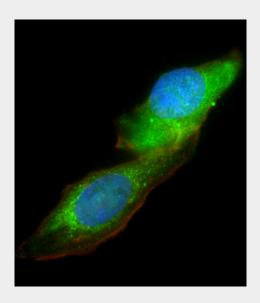
Highly expressed in brain and in myoblasts at the onset of fusion, but not in other tissues. Detected in HeLa (cervical carcinoma), SH-SY5Y (neuroblastoma) and MCF-7 (epithelial tumor) cells, but not in normal epithelial cells

KCNH1 Antibody (C-Term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

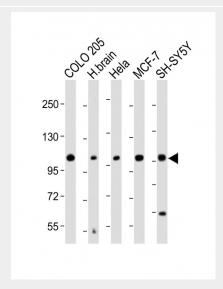
KCNH1 Antibody (C-Term) - Images



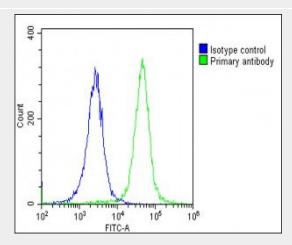
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0. 1% Triton X-100 permeabilized



Hela cells labeling KCNH1 with AP22343b at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-Rabbit IgG secondary antibody at 1/200 dilution (green). Immunofluorescence image showing Nucleus and Cytoplasm staining on Hela cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin(red). The nuclear counter stain is DAPI (blue).



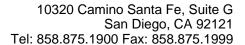
All lanes: Anti-KCNH1 Antibody (C-Term) at 1:2000 dilution Lane 1: COLO 205 whole cell lysate Lane 2: Human brain lysate Lane 3: Hela whole cell lysate Lane 4: MCF-7 whole cell lysate Lane 5: SH-SY5Y whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 111 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Overlay histogram showing Hela cells stained with AP22343b(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22343b, 1:25 dilution) for 60 min at 37°C. The secondary Goat-Anti-Rabbit antibody used was IqG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OE188374) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit $IgG1 (1\mu g/1 \times 10^6 cells)$ used under the same conditions. Acquisition of >10, 000 events was performed.

KCNH1 Antibody (C-Term) - 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.





KCNH1 Antibody (C-Term) - 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).