

HIP14L (P-16): sc-69420

BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. HIP14L, also known as ZDHHC13 (zinc finger, DHHC-type containing 13) or HIP3RP, is a 622 amino acid multi-pass membrane protein that contains one DHHC-type zinc finger and 6 ANK repeats. Expressed as multiple alternatively spliced isoforms, HIP14L functions as a palmitoyltransferase that catalyzes the conversion of palmitoyl-CoA and a protein-cysteine to an S-palmitoyl protein and CoA and, via this catalytic activity, may be involved in the NF κ B signaling pathway. The gene encoding HIP14L maps to human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that maps to chromosome 11.

REFERENCES

- Singaraja, R.R., et al. 2002. HIP14, a novel Ankyrin domain-containing protein, links huntingtin to intracellular trafficking and endocytosis. *Hum. Mol. Genet.* 11: 2815-2828.
- Huang, K., et al. 2004. Huntingtin-interacting protein HIP14 is a palmitoyltransferase involved in palmitoylation and trafficking of multiple neuronal proteins. *Neuron* 44: 977-986.
- Yanai, A., et al. 2006. Palmitoylation of huntingtin by HIP14 is essential for its trafficking and function. *Nat. Neurosci.* 9: 824-831.
- Goytain, A., et al. 2008. Huntingtin-interacting proteins, HIP14 and HIP14L, mediate dual functions, palmitoyl acyltransferase and Mg²⁺ transport. *J. Biol. Chem.* 283: 33365-33374.
- Huang, K., et al. 2009. Neuronal palmitoyl acyl transferases exhibit distinct substrate specificity. *FASEB J.* 23:2605-2615.
- Online Mendelian Inheritance in Man, OMIM[™]. 2009. Johns Hopkins University, Baltimore, MD. MIM Number: 612815. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: ZDHHC13 (human) mapping to 11p15.1; Zdhhc13 (mouse) mapping to 7 B4.

SOURCE

HIP14L (P-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HIP14L of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-69420 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

HIP14L (P-16) is recommended for detection of HIP14L of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

HIP14L (P-16) is also recommended for detection of HIP14L in additional species, including equine, canine, bovine and porcine.

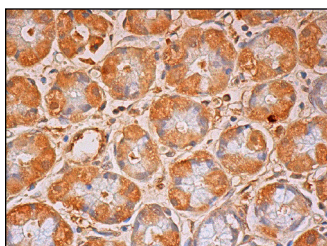
Suitable for use as control antibody for HIP14L siRNA (h): sc-75257, HIP14L siRNA (m): sc-75258, HIP14L shRNA Plasmid (h): sc-75257-SH, HIP14L shRNA Plasmid (m): sc-75258-SH, HIP14L shRNA (h) Lentiviral Particles: sc-75257-V and HIP14L shRNA (m) Lentiviral Particles: sc-75258-V.

Molecular Weight of HIP14L: 71 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz[™]: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



HIP14L (P-16): sc-69420. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lower stomach tissue showing cytoplasmic staining of glandular cells.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

]support products.