

Goat Anti-HIP14 / ZDHHC17 Antibody

Peptide-affinity purified goat antibody Catalog # AF1525a

Specification

Goat Anti-HIP14 / ZDHHC17 Antibody - Product Information

Application WB
Primary Accession OSIUH5

Other Accession
Reactivity
Predicted
Host
Reactivity
Reactivity
Ruman, Mouse
Rat, Dog, Cow
Goat

Clonality Polyclonal Concentration 100ug/200ul

Isotype IgG Calculated MW 72640

Goat Anti-HIP14 / ZDHHC17 Antibody - Additional Information

Gene ID 23390

Other Names

Palmitoyltransferase ZDHHC17, 2.3.1.225, Huntingtin yeast partner H, Huntingtin-interacting protein 14, HIP-14, Huntingtin-interacting protein 3, HIP-3, Huntingtin-interacting protein H, Putative MAPK-activating protein PM11, Putative NF-kappa-B-activating protein 205, Zinc finger DHHC domain-containing protein 17, DHHC-17, ZDHHC17, HIP14, HIP3, HYPH, KIAA0946

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-HIP14 / ZDHHC17 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-HIP14 / ZDHHC17 Antibody - Protein Information

Name ZDHHC17 (HGNC:18412)

Function

Palmitoyltransferase that catalyzes the addition of palmitate onto various protein substrates and is involved in a variety of cellular processes (PubMed:15489887, PubMed:<a



href="http://www.uniprot.org/citations/15603740" target=" blank">15603740, PubMed:24705354, PubMed:27911442, PubMed:28757145). Has no stringent fatty acid selectivity and in addition to palmitate can also transfer onto target proteins myristate from tetradecanoyl-CoA and stearate from octadecanoyl-CoA (By similarity). Palmitoyltransferase specific for a subset of neuronal proteins, including SNAP25, DLG4/PSD95, GAD2, SYT1 and HTT (PubMed: 15603740, PubMed:15489887, PubMed:19139280, PubMed:28757145). Also palmitoylates neuronal protein GPM6A as well as SPRED1 and SPRED3 (PubMed: 24705354). Could also play a role in axonogenesis through the regulation of NTRK1 and the downstream ERK1/ERK2 signaling cascade (By similarity). May be involved in the sorting or targeting of critical proteins involved in the initiating events of endocytosis at the plasma membrane (PubMed:12393793). May play a role in Mg(2+) transport (PubMed:18794299). Could also palmitoylate DNAJC5 and regulate its localization to the Golgi membrane (By similarity). Palmitoylates CASP6, thereby preventing its dimerization and subsequent activation (PubMed: 27911442).

Cellular Location

Golgi apparatus membrane; Multi-pass membrane protein. Cytoplasmic vesicle membrane; Multi-pass membrane protein. Presynaptic cell membrane; Multi-pass membrane protein. Note=Low extracellular Mg(2+) induces increase in Golgi and in post-Golgi membrane vesicles

Tissue Location

Expressed in all brain regions. Expression is highest in the cortex, cerebellum, occipital lobe and caudate and lowest in the spinal cord. Expression is also seen in testis, pancreas, heart and kidney.

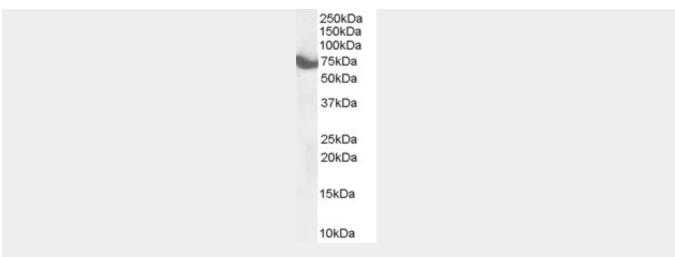
Goat Anti-HIP14 / ZDHHC17 Antibody - Protocols

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

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

Goat Anti-HIP14 / ZDHHC17 Antibody - Images





AF1525a (1 μ g/ml) staining of Mouse Brain lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-HIP14 / ZDHHC17 Antibody - References

Multiple palmitoyltransferases are required for palmitoylation-dependent regulation of large conductance calcium- and voltage-activated potassium channels. Tian L, et al. J Biol Chem, 2010 Jul 30. PMID 20507996.

Golgi-specific DHHC zinc finger protein GODZ mediates membrane Ca2+ transport. Hines RM, et al. J Biol Chem, 2010 Feb 12. PMID 19955568.

The ankyrin repeat domain of Huntingtin interacting protein 14 contains a surface aromatic cage, a potential site for methyl-lysine binding. Gao T, et al. Proteins, 2009 Aug 15. PMID 19434754. Huntingtin-interacting proteins, HIP14 and HIP14L, mediate dual functions, palmitoyl acyltransferase and Mg2+ transport. Goytain A, et al. J Biol Chem, 2008 Nov 28. PMID 18794299. Toward a confocal subcellular atlas of the human proteome. Barbe L, et al. Mol Cell Proteomics, 2008 Mar. PMID 18029348.