PLEKHM2 (N-13): sc-136808



The Power to Question

BACKGROUND

PLEKHM2 (pleckstrin homology domain containing, family M (with RUN domain) member 2), also known as PH domain-containing family M member 2 or salmonella-induced filaments A and kinesin-interacting protein (SKIP), is a 1,019 amino acid cytoplasmic protein responsible for maintaining Golgi apparatus organization. Containing one PH domain and a single RUN domain, PLEKHM2 may control vacuolar membrane dynamics by regulating kinesin activity in the bacterial vacuole. The gene encoding PLEKHM2 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome.

REFERENCES

- Eudy, J.D., et al. 1998. Isolation of a gene encoding a novel member of the nuclear receptor superfamily from the critical region of Usher syndrome type IIa at 1q41. Genomics 50: 382-384.
- Lau, E.K., et al. 1999. Two novel polymorphic sequences in the glucocerebrosidase gene region enhance mutational screening and founder effect studies of patients with Gaucher disease. Hum. Genet. 104: 293-300.
- 3. Bowling, E.L., et al. 2000. The Stickler syndrome: case reports and literature review. Optometry 71: 177-182.
- Plasilova, M., et al. 2004. Exclusion of an extracolonic disease modifier locus on chromosome 1p33-36 in a large Swiss familial adenomatous polyposis kindred. Eur. J. Hum. Genet. 12: 365-371.
- Boucrot, E., et al. 2005. The intracellular fate of Salmonella depends on the recruitment of kinesin. Science 308: 1174-1178.
- Online Mendelian Inheritance in Man, OMIM™. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 609613. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 7. Ohlson, M.B., et al. 2008. Structure and function of Salmonella SifA indicate that its interactions with SKIP, SseJ, and Rho A family GTPases induce endosomal tubulation. Cell Host Microbe. 4: 434-446.
- 8. Betarbet, R., et al. 2008. Fas-associated factor 1 and Parkinson's disease. Neurobiol. Dis. 31: 309-315.

CHROMOSOMAL LOCATION

Genetic locus: PLEKHM2 (human) mapping to 1p36.21; Plekhm2 (mouse) mapping to 4 E1.

SOURCE

PLEKHM2 (N-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of PLEKHM2 of human origin.

STORAGE

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

PRODUCT

Each vial contains 100 μg IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-136808 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PLEKHM2 (N-13) is recommended for detection of PLEKHM2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with PLEKHM1.

PLEKHM2 (N-13) is also recommended for detection of PLEKHM2 in additional species, including bovine and avian.

Suitable for use as control antibody for PLEKHM2 siRNA (h): sc-88804, PLEKHM2 siRNA (m): sc-152321, PLEKHM2 shRNA Plasmid (h): sc-88804-SH, PLEKHM2 shRNA Plasmid (m): sc-152321-SH, PLEKHM2 shRNA (h) Lentiviral Particles: sc-88804-V and PLEKHM2 shRNA (m) Lentiviral Particles: sc-152321-V.

Molecular Weight of PLEKHM2: 113 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit lgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit lgG-HRP: sc-2030 (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 goat anti-rabbit lgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit lgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**