

PLEKHJ1 (H-10): sc-514666

BACKGROUND

PLEKHJ1 (pleckstrin homology domain containing, family J member 1), also known as GNRPX (guanine nucleotide-releasing protein x), is a 149 amino acid phosphoprotein that contains one PH (pleckstrin homology) domain and is expressed in testis and liver. The gene that encodes PLEKHJ1 maps to human chromosome 19, which consists of approximately 63 million bases and makes up over 2% of human genomic DNA. Chromosome 19 contains the greatest gene density of the human chromosomes and is the genetic home for a number of immunoglobulin superfamily members, including killer cell and leukocyte Ig-like receptors, ICAMs, the CEACAM and PSG families, and Fc α receptors. Key genes for eye color and hair color also map to chromosome 19. Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and Insulin-dependent diabetes are also linked to chromosome 19.

REFERENCES

1. LaPoint, S.F., et al. 2000. Cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL). *Adv. Anat. Pathol.* 7: 307-321.
2. Buchet-Poyau, K., et al. 2002. Search for the second Peutz-Jeghers syndrome locus: exclusion of the STK13, PRKCG, KLK10, and PSCD2 genes on chromosome 19 and the STK11IP gene on chromosome 2. *Cytogenet. Genome Res.* 97: 171-178.
3. Grimwood, J., et al. 2004. The DNA sequence and biology of human chromosome 19. *Nature* 428: 529-535.
4. Parham, P. 2005. Immunogenetics of killer cell immunoglobulin-like receptors. *Mol. Immunol.* 42: 459-462.
5. Vikelis, M., et al. 2007. A novel CADASIL-causing mutation in a stroke patient. *Swiss Med. Wkly.* 137: 323-325.

CHROMOSOMAL LOCATION

Genetic locus: PLEKHJ1 (human) mapping to 19p13.3; Plekhj1 (mouse) mapping to 10 C1.

SOURCE

PLEKHJ1 (H-10) is a mouse monoclonal antibody raised against amino acids 1-56 mapping at the N-terminus of PLEKHJ1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG $_{2a}$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PLEKHJ1 (H-10) is available conjugated to agarose (sc-514666 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514666 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514666 PE), fluorescein (sc-514666 FITC), Alexa Fluor[®] 488 (sc-514666 AF488), Alexa Fluor[®] 546 (sc-514666 AF546), Alexa Fluor[®] 594 (sc-514666 AF594) or Alexa Fluor[®] 647 (sc-514666 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-514666 AF680) or Alexa Fluor[®] 790 (sc-514666 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

PLEKHJ1 (H-10) is recommended for detection of PLEKHJ1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for PLEKHJ1 siRNA (h): sc-97180, PLEKHJ1 siRNA (m): sc-152319, PLEKHJ1 shRNA Plasmid (h): sc-97180-SH, PLEKHJ1 shRNA Plasmid (m): sc-152319-SH, PLEKHJ1 shRNA (h) Lentiviral Particles: sc-97180-V and PLEKHJ1 shRNA (m) Lentiviral Particles: sc-152319-V.

Molecular Weight of PLEKHJ1: 18 kDa.

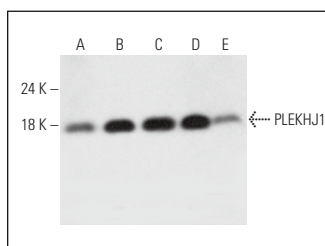
Positive Controls: HeLa whole cell lysate: sc-2200, NTERA-2 cl.D1 whole cell lysate: sc-364181 or Hep G2 cell lysate: sc-2227.

RECOMMENDED SUPPORT REAGENTS

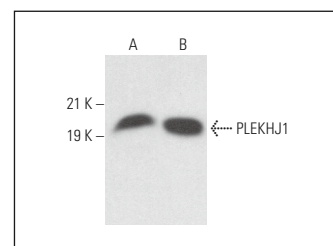
To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.
- 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).
- 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



PLEKHJ1 (H-10): sc-514666. Western blot analysis of PLEKHJ1 expression in Jurkat (A), HeLa (B), NTERA-2 cl.D1 (C) and Hep G2 (D) whole cell lysates and human liver tissue extract (E).



PLEKHJ1 (H-10): sc-514666. Western blot analysis of PLEKHJ1 expression in HeLa (A) and Caco-2 (B) whole cell lysates.

STORAGE

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

RESEARCH USE

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

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