SANTA CRUZ BIOTECHNOLOGY, INC.

PHYHIPL (F-3): sc-514256

BACKGROUND

PHYHIPL (phytanoyl-CoA 2-hydroxylase interacting protein-like), also known as phytanoyl-CoA hydroxylase-interacting protein-like, is a 376 amino acid protein that contains one fibronectin type-III domain and belongs to the PHYHIP family. Conserved in chimpanzee, canine, mouse, rat, chicken, zebrafish and *Caenorhabditis elegans*, PHYHIPL exists as three alternatively spliced isoforms. PHYHIPL is a down-regulated target of IRX1, a homeobox tumor suppressor gene linked to gastric carcinoma. PHYHIPL may also play a role in the development of the central system. The gene that encodes PHYHIPL maps to human chromosome 10q21.1.

REFERENCES

1. Gerhard, D.S., et al. 2004. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Genome Res. 14: 2121-2127.
2. Deloukas, P., et al. 2004. The DNA sequence and comparative analysis of human chromosome 10. Nature 429: 375-381.
3. Grupe, A., et al. 2006. A scan of chromosome 10 identifies a novel locus showing strong association with late-onset Alzheimer disease. Am. J. Hum. Genet. 78: 78-88.
4. Gurok, U., et al. 2007. Laser capture microdissection and microarray analysis of dividing neural progenitor cells from the adult rat hippocampus. Eur. J. Neurosci. 26: 1079-1090.

CHROMOSOMAL LOCATION

Genetic locus: PHYHIPL (human) mapping to 10q21.1; Phyhipl (mouse) mapping to 10 B5.3.

SOURCE

PHYHIPL (F-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1-17 at the N-terminus of PHYHIPL of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PHYHIPL (F-3) is available conjugated to agarose (sc-514256 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-514256 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514256 PE), fluorescein (sc-514256 FITC), Alexa Fluor® 488 (sc-514256 AF488), Alexa Fluor® 546 (sc-514256 AF546), Alexa Fluor® 594 (sc-514256 AF594) or Alexa Fluor® 647 (sc-514256 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514256 AF680) or Alexa Fluor® 790 (sc-514256 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514256 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

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

APPLICATIONS

PHYHIPL (F-3) is recommended for detection of PHYHIPL of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 PHYHIPL siRNA (h): sc-90711, PHYHIPL siRNA (m): sc-152241, PHYHIPL shRNA Plasmid (h): sc-90711-SH, PHYHIPL shRNA Plasmid (m): sc-152241-SH, PHYHIPL shRNA (h) Lentiviral Particles: sc-90711-V and PHYHIPL shRNA (m) Lentiviral Particles: sc-152241-V.

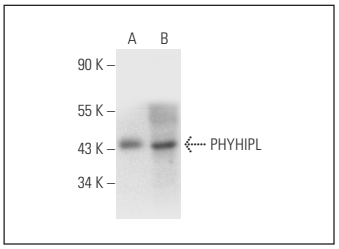
Molecular Weight of PHYHIPL isoforms 1/2/3: 42/40/6 kDa.

Positive Controls: mouse testis extract: sc-2405, human cerebral cortex extract: sc-516707 or human brain extract: sc-364375.

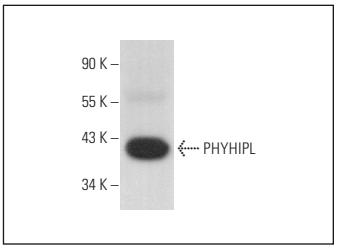
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ 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



PHYHIPL (F-3): sc-514256. Western blot analysis of PHYHIPL expression in human cerebral cortex (**A**) and mouse testis (**B**) tissue extracts.



PHYHIPL (F-3): sc-514256. Western blot analysis of PHYHIPL expression in human brain tissue extract.

SELECT PRODUCT CITATIONS

1. Villar-Conde, S., et al. 2021. The human hippocampus in Parkinson's disease: an integrative stereological and proteomic study. J. Parkinsons Dis. 11: 1345-1365.

STORAGE

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