SANTA CRUZ BIOTECHNOLOGY, INC.

YIPF3 (C-12): sc-162419



BACKGROUND

The YIP1 family consists of a group of small membrane proteins that bind Rab GTPases and function in membrane trafficking and vesicle biogenesis. YIPF3 (YIP1 family member 3), also known as KLIP1 (killer lineage protein 1) or FinGER3, is a 350 amino acid cytoplasmic and multi-pass membrane protein belonging to the YIP1 family. Involved in hematopoiesis, YIPF3 is found in fetal liver and is expressed by nucleated hematopoietic cells. The gene encoding YPIF3 maps to human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, Porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

REFERENCES

- Brunner, H.G., et al. 1994. A Stickler syndrome gene is linked to chromosome 6 near the COL11A2 gene. Hum. Mol. Genet. 3: 1561-1564.
- 2. Prost, S., et al. 2002. Characterization of a novel hematopoietic marker expressed from early embryonic hematopoietic stem cells to adult mature lineages. Blood Cells Mol. Dis. 29: 236-248.
- Cesari, R., et al. 2003. Parkin, a gene implicated in autosomal recessive juvenile parkinsonism, is a candidate tumor suppressor gene on chromosome 6q25-q27. Proc. Natl. Acad. Sci. USA 100: 5956-5961.
- Chen, C.Z. and Collins, R.N. 2005. Insights into biological functions across species: examining the role of Rab proteins in YIP1 family function. Biochem. Soc. Trans. 33: 614-618.
- Chen, C.Z. and Collins, R.N. 2005. Analysis and properties of the yeast YIP1 family of Ypt-interacting proteins. Meth. Enzymol. 403: 333-339.
- 6. Online Mendelian Inheritance in Man, OMIM™. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 609775. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- 7. Bläker, H., et al. 2008. Recurrent deletions at 6q in early age of onset non-HNPCC- and non-FAP-associated intestinal carcinomas. Evidence for a novel cancer susceptibility locus at 6q14-q22. Genes Chromosomes Cancer 47: 159-164.

CHROMOSOMAL LOCATION

Genetic locus: YIPF3 (human) mapping to 6p21.1; Yipf3 (mouse) mapping to 17 C.

SOURCE

YIPF3 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of YIPF3 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 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-162419 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

YIPF3 (C-12) is recommended for detection of YIPF3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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); non cross-reactive with other YIPF family members.

YIPF3 (C-12) is also recommended for detection of YIPF3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for YIPF3 siRNA (h): sc-95487, YIPF3 siRNA (m): sc-155406, YIPF3 shRNA Plasmid (h): sc-95487-SH, YIPF3 shRNA Plasmid (m): sc-155406-SH, YIPF3 shRNA (h) Lentiviral Particles: sc-95487-V and YIPF3 shRNA (m) Lentiviral Particles: sc-155406-V.

Molecular Weight of YIPF3: 38 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, Hep G2 cell lysate: sc-2227 or K-562 whole cell lysate: sc-2203.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

90 K

55 K

43 K

34 K

YIPF3 (C-12): sc-162419. Western blot analysis of

YIPF3 expression in HeLa whole cell lysate

✓···· YIPF3

DATA



YIPF3 (C-12): sc-162419. Western blot analysis of YIPF3 expression in K-562 $({\rm A}),$ Hep G2 $({\rm B}),$ Hel.92.1.7 $({\rm C}),$ and A-431 $({\rm D})$ whole cell lysates.

RESEARCH USE

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