SANTA CRUZ BIOTECHNOLOGY, INC.

YIPF5 (Q-14): sc-160927

BACKGROUND

The YIP1 family consists of a group of small membrane proteins that bind Rab GTPases and function in membrane trafficking and vesicle biogenesis. YIPF5 (YIP1 family member 5), also known as FinGER5, SB140, SMAP5 (smooth muscle cell-associated protein 5) or YIP1A (YPT-interacting protein 1 A), is a 257 amino acid multi-pass membrane protein of the endoplasmic reticulum, Golgi apparatus and cytoplasmic vesicle. Belonging to the YIP1 family and existing as three alternatively spliced isoforms, YIPF5 is ubiquitously expressed but found at high levels in coronary smooth muscles, kidney, small intestine, liver and skeletal muscle. YIPF5 is involved in retrograde transport from the Golgi apparatus to the endoplasmic reticulum, and interacts with YIF1A, SEC23, Sec24 and possibly Rab 1A. YIPF5 is induced by TGFβ1 and is encoded by a gene located on human chromosome 5.

REFERENCES

1. Tang, B.L., et al. 2001. A membrane protein enriched in endoplasmic reticulum exit sites interacts with COPII. J. Biol. Chem. 276: 40008-40017.
2. Jin, C., et al. 2005. Human YIPA specifies the localization of Yif1 to the Golgi apparatus. Biochem. Biophys. Res. Commun. 334: 16-22.
3. Stolle, K., et al. 2005. Cloning, cellular localization, genomic organization, and tissue-specific expression of the TGFβ1-inducible SMAP-5 gene. Gene 351: 119-130.
4. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 611483. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
5. Yoshida, Y., et al. 2008. YIPF5 and YIF1A recycle between the ER and the Golgi apparatus and are involved in the maintenance of the Golgi structure. Exp. Cell Res. 314: 3427-3443.
6. Kano, F., et al. 2009. YIP1A regulates the COPI-independent retrograde transport from the Golgi complex to the ER. J. Cell. Sci. 122: 2218-2227.

CHROMOSOMAL LOCATION

Genetic locus: Yipf5 (mouse) mapping to 18 B3.

SOURCE

YIPF5 (Q-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of YIPF5 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-160927 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

YIPF5 (Q-14) is recommended for detection of YIPF5 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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.

Suitable for use as control antibody for YIPF5 siRNA (m): sc-155408, YIPF5 shRNA Plasmid (m): sc-155408-SH and YIPF5 shRNA (m) Lentiviral Particles: sc-155408-V.

Molecular Weight of YIPF5: 27 kDa.

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) 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.

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.