SANTA CRUZ BIOTECHNOLOGY, INC.

FAPP2 (h): 293T Lysate: sc-172461

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The members of the phosphatidylinositol kinase (PIK) superfamily can be divided into three groups based on their substrate specificity. PIKs convert phosphatidylinositol (PI) into PI phosphate [PI(3)P], PI phosphate [PI(4)P], PI bis-phosphate [PI(4,5)P2] and PI triphosphate [PI(3,4,5)P3]. Phosphatidylinositides represent important regulatory molecules and are involved in a diverse array of signaling pathways. The phosphatidylinositol-four-phosphate adapter proteins, FAPP1, also designated Pleckstrin homology domain-containing family A member 3 (PLEKHA3), and FAPP2, also designated Pleckstrin homology domain-containing family A member 8 (PLEKHA8), interact with PI(4)P to mediate transport between the *trans*-Golgi network and plasma membrane.

REFERENCES

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2. Godi, A., et al. 2004. FAPPs control Golgi-to-cell-surface membrane traffic by binding to ARF and PtdIns(4)P. Nat. Cell Biol. 6: 393-404.
3. Vieira, O.V., et al. 2005. FAPP2 is involved in the transport of apical cargo in polarized MDCK cells. J. Cell Biol. 170: 521-526.
4. Balla, A., et al. 2005. A plasma membrane pool of phosphatidylinositol 4-phosphate is generated by phosphatidylinositol 4-kinase type-III α: studies with the PH domains of the oxysterol binding protein and FAPP1. Mol. Biol. Cell 16: 1282-1295.
5. Yui, N., et al. 2009. FAPP2 is required for aquaporin-2 apical sorting at *trans*-Golgi network in polarized MDCK cells. Am. J. Physiol., Cell Physiol. 297: C1389-C1396.
6. Tritz, R., et al. 2009. FAPP2 gene downregulation increases tumor cell sensitivity to Fas-induced apoptosis. Biochem. Biophys. Res. Commun. 383: 167-171.
7. Cao, X., et al. 2009. Golgi protein FAPP2 tubulates membranes. Proc. Natl. Acad. Sci. USA 106: 21121-21125.
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CHROMOSOMAL LOCATION

Genetic locus: PLEKHA8 (human) mapping to 7p14.3.

PRODUCT

FAPP2 (h): 293T Lysate represents a lysate of human FAPP2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

APPLICATIONS

FAPP2 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive FAPP2 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

PROTOCOLS

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