

# PLEKHA6 (G-13): sc-137675

## BACKGROUND

PLEKHA6 (pleckstrin homology domain containing, family A member 6), also known as PEPP3 (phosphoinositol 3-phosphate-binding protein 3), is a 1,048 amino acid protein that contains one N-terminal pleckstrin homology (PH) domain. PLEKHA6 shares significant homology with PLEKHA4 and PLEKHA5 solely in the PH domain, indicating that it may likewise interact with PtdIns3P. PLEKHA6 likely functions as an adaptor molecule and may play a role in the pathophysiology of schizophrenia. Ubiquitously expressed, with highest expression in heart, kidney and brain, PLEKHA6 exhibits phosphoinositide-binding specificity and participates in lipid-binding activities. Although PLEKHA6 is not known to be involved in signaling related to EGF receptors, which are expressed by many tumors, it is differentially phosphorylated between EGF receptor mutant and WT cell lines. The gene that encodes PLEKHA6 maps to human chromosome 1q32.1.

## REFERENCES

- Mandrek, K. 1991. Diameter and wall thickness recording of canine pylorus with implantable miniature ultrasonic transducers. *Dig Dis*. 9: 325-331.
- Dowler, S., Currie, R.A., Campbell, D.G., Deak, M., Kular, G., Downes, C.P. and Alessi, D.R. 2000. Identification of pleckstrin-homology-domain-containing proteins with novel phosphoinositide-binding specificities. *Biochem. J.* 351: 19-31.
- Riemenschneider, M.J., Knobbe, C.B. and Reifenberger, G. 2003. Refined mapping of 1q32 amplicons in malignant gliomas confirms MDM4 as the main amplification target. *Int. J. Cancer* 104: 752-757.
- Zhou, W., Shirabe, K. and Kuwada, J.Y. 2006. Molecular cloning and expression of two small leucine-rich proteoglycan (SLRP) genes, *dspg3l* and *optcl*, in zebrafish. *Gene Expr. Patterns* 6: 482-488.
- Zhou, X., Davis, D.R. and Sigmund, C.D. 2006. The human renin kidney enhancer is required to maintain base-line renin expression but is dispensable for tissue-specific, cell-specific, and regulated expression. *J. Biol. Chem.* 281: 35296-35304.
- Rodenburg, W., Keijer, J., Kramer, E., Vink, C., van der Meer, R. and Bovee-Oudenhoven, I.M. 2008. Impaired barrier function by dietary fructo-oligosaccharides (FOS) in rats is accompanied by increased colonic mitochondrial gene expression. *BMC Genomics* 9: 144.
- Guo, A., Villen, J., Kornhauser, J., Lee, K.A., Stokes, M.P., Rikova, K., Possemato, A., Nardone, J., Innocenti, G., Wetzel, R., Wang, Y., MacNeill, J., Mitchell, J., Gygi, S.P., Rush, J., Polakiewicz, R.D. and Comb, M.J. 2008. Signaling networks assembled by oncogenic EGFR and c-Met. *Proc. Natl. Acad. Sci. USA* 105: 692-697.
- Um, H.N., Han, J.M., Hwang, J.I., Hong, S.I., Vaudry, H. and Seong, J.Y. 2010. Molecular coevolution of kisspeptins and their receptors from fish to mammals. *Ann. N.Y. Acad. Sci.* 1200: 67-74.

## STORAGE

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

## CHROMOSOMAL LOCATION

Genetic locus: PLEKHA6 (human) mapping to 1q32.1; *Plekha6* (mouse) mapping to 1 E4.

## SOURCE

PLEKHA6 (G-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PLEKHA6 of human 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-137675 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

PLEKHA6 (G-13) is recommended for detection of PLEKHA6 of mouse, rat and human 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 PLEKHA family members.

Suitable for use as control antibody for PLEKHA6 siRNA (h): sc-88253, PLEKHA6 siRNA (m): sc-152307, PLEKHA6 shRNA Plasmid (h): sc-88253-SH, PLEKHA6 shRNA Plasmid (m): sc-152307-SH, PLEKHA6 shRNA (h) Lentiviral Particles: sc-88253-V and PLEKHA6 shRNA (m) Lentiviral Particles: sc-152307-V.

Molecular Weight of PLEKHA6: 117 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](http://www.scbt.com) or our catalog for detailed protocols and support products.