

PLEKHA5 (H-255): sc-292948

BACKGROUND

PLEKHA5 (pleckstrin homology domain containing, family A member 5), also known as KIAA1686 or PEPP2, is a 1,116 amino acid protein that contains one PH domain and 2 WW domains and is highly expressed in kidney and heart tissue. Multiple isoforms of PLEKHA5 exist due to alternative splicing events. The gene encoding PLEKHA5 maps to human chromosome 12, which encodes over 1,100 genes and comprises about 4.5% of the human genome. A number of skeletal deformities are linked to chromosome 12, including hypochondrogenesis, achondrogenesis and Kniest dysplasia. Chromosome 12 is also home to a homeobox gene cluster which encodes crucial transcription factors for morphogenesis, and the natural killer complex gene cluster encoding C-type lectin proteins which mediate the NK cell response to MHC I interaction.

REFERENCES

1. Dowler, S., et al. 2000. Identification of pleckstrin-homology-domain-containing proteins with novel phosphoinositide-binding specificities. *Biochem. J.* 35: 19-31.
2. Nagase, T., et al. 2000. Prediction of the coding sequences of unidentified human genes. XIX. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. *DNA Res.* 7: 347-355.
3. Trowsdale, J., et al. 2001. The genomic context of natural killer receptor extended gene families. *Immunol. Rev.* 181: 20-38.
4. Zumkeller, W., et al. 2004. Genotype/phenotype analysis in a patient with pure and complete trisomy 12p. *Am. J. Med. Genet. A* 129: 261-264.
5. Montpetit, A., et al. 2004. Mutational and expression analysis of the chromosome 12p candidate tumor suppressor genes in pre-B acute lymphoblastic leukemia. *Leukemia* 18: 1499-1504.
6. Kelley, J., et al. 2005. Comparative genomics of natural killer cell receptor gene clusters. *PLoS Genet.* 1: e27.
7. Online Mendelian Inheritance in Man, OMIM[™]. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 607770. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
8. Segel, R., et al. 2006. The natural history of trisomy 12p. *Am. J. Med. Genet. A* 140: 695-703.
9. Stein, R. 2007. Genetics of noonan syndrome—a new gene, and the search is still on. *Clin. Genet.* 72: 402-404.

CHROMOSOMAL LOCATION

Genetic locus: PLEKHA5 (human) mapping to 12p12.3; Plekha5 (mouse) mapping to 6 G2.

SOURCE

PLEKHA5 (H-255) is a rabbit polyclonal antibody raised against amino acids 216-470 mapping within an internal region of PLEKHA5 of human origin.

RESEARCH USE

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

PRODUCT

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

APPLICATIONS

PLEKHA5 (H-255) is recommended for detection of PLEKHA5 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).

PLEKHA5 (H-255) is also recommended for detection of PLEKHA5 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for PLEKHA5 siRNA (h): sc-95837, PLEKHA5 siRNA (m): sc-152306, PLEKHA5 shRNA Plasmid (h): sc-95837-SH, PLEKHA5 shRNA Plasmid (m): sc-152306-SH, PLEKHA5 shRNA (h) Lentiviral Particles: sc-95837-V and PLEKHA5 shRNA (m) Lentiviral Particles: sc-152306-V.

Molecular Weight of PLEKHA5: 127 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

STORAGE

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

PROTOCOLS

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


 MONOS
 Satisfaction
 Guaranteed

Try **PLEKHA5 (E-2): sc-390311**, our highly recommended monoclonal alternative to PLEKHA5 (H-255).