

NPP6 (D-14): sc-161955

BACKGROUND

NPP6, also known as ENPP6 (ectonucleotide pyrophosphatase/phosphodiesterase family member 6), is a 440 amino acid member of the nucleotide pyrophosphatase/phosphodiesterase family. NPP6 is a secreted and single-pass type I membrane protein. Predominantly expressed in brain and kidney, NPP6 is a choline-specific glycerophosphodiester phosphodiesterase. NPP6 can hydrolyze the classical substrate for phospholipase C, p-nitrophenyl phosphorylcholine, glycerophosphorylcholine, sphingosylphosphorylcholine and lysophosphatidylcholine (LPC). NPP6 has been found to have a preference for LPC with polyunsaturated or short fatty acids. The gene encoding NPP6 maps to human chromosome 4, which consists of approximately 6% of the human genome and nearly 900 genes. Chromosome 4 is associated with Huntington's disease, FGFR-3, Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

REFERENCES

1. Bonaventure, J., et al. 1996. Common mutations in the fibroblast growth factor receptor 3 (FGFR 3) gene account for achondroplasia, hypochondroplasia, and thanatophoric dwarfism. *Am. J. Med. Genet.* 63: 148-154.
2. Kalchman, M.A., et al. 1996. Huntingtin is ubiquitinated and interacts with a specific ubiquitin-conjugating enzyme. *J. Biol. Chem.* 271: 19385-19394.
3. Howard, T.D., et al. 1997. Autosomal dominant postaxial polydactyly, nail dystrophy, and dental abnormalities map to chromosome 4p16, in the region containing the Ellis-van Creveld syndrome locus. *Am. J. Hum. Genet.* 61: 1405-1412.
4. Singhrao, S.K., et al. 1998. Huntingtin protein colocalizes with lesions of neurodegenerative diseases: An investigation in Huntington's, Alzheimer's and Pick's diseases. *Exp. Neurol.* 150: 213-222.
5. Krakow, D., et al. 2000. Exclusion of the Ellis-van Creveld region on chromosome 4p16 in some families with asphyxiating thoracic dystrophy and short-rib polydactyly syndromes. *Eur. J. Hum. Genet.* 8: 645-648.
6. Sommardahl, C., Cottrell, M., Wilkinson, J.E., Woychik, R.P. and Johnson, D.K. 2001. Phenotypic variations of orpk mutation and chromosomal localization of modifiers influencing kidney phenotype. *Physiol. Genomics* 7: 127-134.
7. Dobson, C.M., Wai, T., Leclerc, D., Wilson, A., Wu, X., Dore, C., Hudson, T., Rosenblatt, D.S. and Gravel, R.A. 2002. Identification of the gene responsible for the cblA complementation group of vitamin B12-responsive methylmalonic acidemia based on analysis of prokaryotic gene arrangements. *Proc. Natl. Acad. Sci. USA* 99: 15554-15559.

CHROMOSOMAL LOCATION

Genetic locus: ENPP6 (human) mapping to 4q35.1; Enpp6 (mouse) mapping to 8 B1.1.

SOURCE

NPP6 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of NPP6 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-161955 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NPP6 (D-14) is recommended for detection of NPP6 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 NPP4.

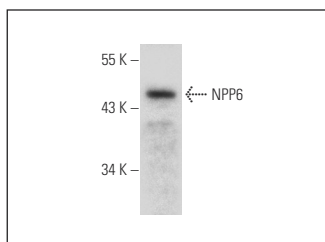
NPP6 (D-14) is also recommended for detection of NPP6 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for NPP6 siRNA (h): sc-89237, NPP6 siRNA (m): sc-150054, NPP6 shRNA Plasmid (h): sc-89237-SH, NPP6 shRNA Plasmid (m): sc-150054-SH, NPP6 shRNA (h) Lentiviral Particles: sc-89237-V and NPP6 shRNA (m) Lentiviral Particles: sc-150054-V.

Molecular Weight of NPP6: 50 kDa.

Positive Controls: mouse brain extract: sc-2253.

DATA



NPP6 (D-14): sc-161955. Western blot analysis of NPP6 expression in mouse brain tissue extract.

STORAGE

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

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **NPP6 (F-8): sc-373890** or **NPP6 (G-9): sc-373900**, our highly recommended monoclonal alternatives to NPP6 (D-14).