SANTA CRUZ BIOTECHNOLOGY, INC.

NBPF7 (E-18): sc-248055



BACKGROUND

Members of the neuroblastoma breakpoint family are encoded by genes that map to a region of segmental duplications on human chromosome 1. NBPF7 (neuroblastoma breakpoint family member 7), is a 421 amino acid cytoplasmic protein that belongs to the NBPF family and contains 2 NBPF domains. The gene encoding NBPF7 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

- Eudy, J.D., Weston, M.D., Yao, S., Hoover, D.M., Rehm, H.L., Ma-Edmonds, M., Yan, D., Ahmad, I., Cheng, J.J., Ayuso, C., Cremers, C., Davenport, S., Moller, C., Talmadge, C.B., Beisel, K.W., et al. 1998. Mutation of a gene encoding a protein with extracellular matrix motifs in Usher syndrome type IIa. Science 280: 1753-1757.
- Tayebi, N., Callahan, M., Madike, V., Stubblefield, B.K., Orvisky, E., Krasnewich, D., Fillano, J.J. and Sidransky, E. 2001. Gaucher disease and parkinsonism: a phenotypic and genotypic characterization. Mol. Genet. Metab. 73: 313-321.
- Plasilova, M., Russell, A.M., Wanner, A., Wolf, A., Dobbie, Z., Müller, H.J. and Heinimann, K. 2004. Exclusion of an extracolonic disease modifier locus on chromosome 1p33-36 in a large Swiss familial adenomatous polyposis kindred. Eur. J. Hum. Genet. 12: 365-371.
- Vandepoele, K., Van Roy, N., Staes, K., Speleman, F. and van Roy, F. 2005. A novel gene family NBPF: intricate structure generated by gene duplications during primate evolution. Mol. Biol. Evol. 22: 2265-2274.
- Betarbet, R., Anderson, L.R., Gearing, M., Hodges, T.R., Fritz, J.J., Lah, J.J. and Levey, A.I. 2008. Fas-associated factor 1 and Parkinson's disease. Neurobiol. Dis. 31: 309-315.
- Holliday, E.G., Nyholt, D.R., Tirupati, S., John, S., Ramachandran, P., Ramamurti, M., Ramadoss, A.J., Jeyagurunathan, A., Kottiswaran, S., Smith, H.J., Filippich, C., Nertney, D.A., Nancarrow, D.J., et al. 2009. Strong evidence for a novel schizophrenia risk locus on chromosome 1p31.1 in homogeneous pedigrees from Tamil Nadu, India. Am. J. Psychiatry 166: 206-215.
- Balcárková, J., Urbánková, H., Scudla, V., Holzerová, M., Bacovský, J., Indrák, K. and Jarosová, M. 2009. Gain of chromosome arm 1q in patients in relapse and progression of multiple myeloma. Cancer Genet. Cytogenet. 192: 68-72.
- 8. Yokoi, T., Koide, R., Matsuoka, K., Nakagawa, A. and Azuma, N. 2009. Analysis of the vitreous membrane in a case of type 1 Stickler syndrome. Graefes Arch. Clin. Exp. Ophthalmol. 247: 715-718.

CHROMOSOMAL LOCATION

Genetic locus: NBPF7 (human) mapping to 1p12.

SOURCE

NBPF7 (E-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of NBPF7 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-248055 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NBPF7 (E-18) is recommended for detection of NBPF7 of 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 NBPF family members.

Suitable for use as control antibody for NBPF7 siRNA (h): sc-106825, NBPF7 shRNA Plasmid (h): sc-106825-SH and NBPF7 shRNA (h) Lentiviral Particles: sc-106825-V.

Molecular Weight of NBPF7: 48 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) Immunofluo-rescence: 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.

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.

PROTOCOLS

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