## SANTA CRUZ BIOTECHNOLOGY, INC.

# NBPF7 (C-17): sc-248056



## 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., et al. 1998. Mutation of a gene encoding a protein with extracellular matrix motifs in Usher syndrome type IIα. Science 280: 1753-1757.
- 2. Tayebi, N., et al. 2001. Gaucher disease and parkinsonism: a phenotypic and genotypic characterization. Mol. Genet. Metab. 73: 313-321.
- Plasilova, M., et al. 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., et al. 2005. A novel gene family NBPF: intricate structure generated by gene duplications during primate evolution. Mol. Biol. Evol. 22: 2265-2274.
- Betarbet, R., et al. 2008. Fas-associated factor 1 and Parkinson's disease. Neurobiol. Dis. 31: 309-315.
- Holliday, E.G., 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.
- 7. Balcárková, J., et al. 2009. Gain of chromosome arm 1q in patients in relapse and progression of multiple myeloma. Cancer Genet. Cytogenet. 192: 68-72.
- Yokoi, T., et al. 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 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of NBPF7 of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-248056 P, (100  $\mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

NBPF7 (C-17) is recommended for detection of NBPF7 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 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.

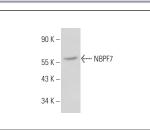
Molecular Weight of NBPF7: 48 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203.

## **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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 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<sup>™</sup> Mounting Medium: sc-24941.

### DATA



NBPF7 (C-17): sc-248056. Western blot analysis of NBPF7 expression in K-562 whole cell lysate.

## STORAGE

Store at 4° C, \*\*D0 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.