



NBPF (Y-14): sc-82243

BACKGROUND

NBPF1 (neuroblastoma breakpoint family, member 1), also known as AD2, NBG, AB13, AB14 or AB23, is a 1,214 amino acid protein that localizes to the cytoplasm and contains eight NBPF domains. Expressed in a variety of tissues, NBPF1 belongs to the neuroblastoma breakpoint family and is encoded by a gene which maps to human chromosome 1. Chromosome 1 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

- Weise, A., Starke, H., Mrasek, K., Claussen, U. and Liehr, T. 2005. New insights into the evolution of chromosome 1. *Cytogenet. Genome Res.* 108: 217-222.
- 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.
- Marzin, Y., Jamet, D., Douet-Guilbert, N., Morel, F., Le Bris, M.J., Morice, P., Abgrall, J.F., Berthou, C. and De Braekeleer, M. 2006. Chromosome 1 abnormalities in multiple myeloma. *Anticancer Res.* 26: 953-959.
- Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 610501. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Vandepoele, K., Andries, V., Van Roy, N., Staes, K., Vandesompele, J., Laureys, G., De Smet, E., Berx, G., Speleman, F. and van Roy, F. 2008. A constitutional translocation t(1;17)(p36.2;q11.2) in a neuroblastoma patient disrupts the human NBPF1 and ACCN1 genes. *PLoS ONE.* 3: e2207.
- Vandepoele, K., Andries, V. and van Roy, F. 2009. The NBPF1 promoter has been recruited from the unrelated EVI5 gene before simian radiation. *Mol. Biol. Evol.* 26: 1321-1332.

CHROMOSOMAL LOCATION

Genetic locus: NBPF1 (human) mapping to 1p36.13.

SOURCE

NBPF (Y-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NBPF20 of human origin.

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.

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-82243 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NBPF (Y-14) is recommended for detection of A broad range of NBPF family members 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).

Suitable for use as control antibody for NBPF1 siRNA (h): sc-106281, NBPF1 shRNA Plasmid (h): sc-106281-SH and NBPF1 shRNA (h) Lentiviral Particles: sc-106281-V.

Molecular Weight of NBPF: 139 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.