

# BFP (K-20): sc-74347

## BACKGROUND

The RING-type zinc finger motif is present in a number of viral and eukaryotic proteins and is made of a conserved cysteine-rich domain that is able to bind two zinc atoms. Proteins that contain this conserved domain are generally involved in the ubiquitination pathway of protein degradation. BFP (brain finger protein), also known as RNF112 (RING finger protein 112) or ZNF179 (zinc finger protein 179), is a 632 amino acid protein that is expressed predominantly in brain where it may be involved in protein degradation pathways, as well as in the development of P19 embryonic carcinoma. The gene encoding BFP maps within a region of human chromosome 17 that is associated with Smith-Magenis syndrome (SMS), suggesting a role for BFP in the pathogenesis of SMS.

## REFERENCES

- Borden, K.L. and Freemont, P.S. 1996. The RING finger domain: a recent example of a sequence-structure family. *Curr. Opin. Struct. Biol.* 6: 395-401.
- Matsuda, Y., Inoue, S., Seki, N., Hosoi, T., Orimo, A., Muramatsu, M. and Hori, T. 1996. Chromosome mapping of human (ZNF179), mouse, and rat genes for brain finger protein (BFP), a member of the RING finger family. *Genomics* 33: 325-327.
- Kimura, T., Arakawa, Y., Inoue, S., Fukushima, Y., Kondo, I., Koyama, K., Hosoi, T., Orimo, A., Muramatsu, M., Nakamura, Y., Abe, T. and Inazawa, J. 1997. The brain finger protein gene (ZNF179), a member of the RING finger family, maps within the Smith-Magenis syndrome region at 17p11.2. *Am. J. Med. Genet.* 69: 320-324.
- Orimo, A., Inoue, S., Ikeda, K., Sato, M., Kato, A., Tominaga, N., Suzuki, M., Noda, T., Watanabe, M. and Muramatsu, M. 1998. Molecular cloning, localization, and developmental expression of mouse brain finger protein (Bfp)/ZNF179: distribution of bfp mRNA partially coincides with the affected areas of Smith-Magenis syndrome. *Genomics* 54: 59-69.
- Online Mendelian Inheritance in Man, OMIM™. 1998. Johns Hopkins University, Baltimore, MD. MIM Number: 601237. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

## CHROMOSOMAL LOCATION

Genetic locus: RNF112 (human) mapping to 17p11.2; Rnf112 (mouse) mapping to 11 B2.

## SOURCE

BFP (K-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BFP 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-74347 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

BFP (K-20) is recommended for detection of BFP 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).

BFP (K-20) is also recommended for detection of BFP in additional species, including equine and canine.

Suitable for use as control antibody for BFP siRNA (h): sc-72647, BFP siRNA (m): sc-72648, BFP shRNA Plasmid (h): sc-72647-SH, BFP shRNA Plasmid (m): sc-72648-SH, BFP shRNA (h) Lentiviral Particles: sc-72647-V and BFP shRNA (m) Lentiviral Particles: sc-72648-V.

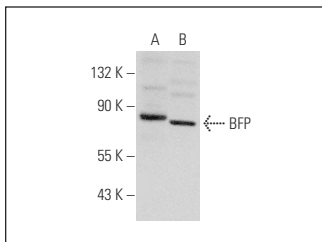
Molecular Weight of BFP: 68 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, HEK293 whole cell lysate: sc-45136 or OVCA9-3 whole cell lysate.

## 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) 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™ Mounting Medium: sc-24941.

## DATA



BFP (K-20): sc-74347. Western blot analysis of BFP expression in HEK293 (A) and OVCA9-3 (B) whole cell lysates.

## 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.