

BF-1 (O-22): sc-130975

BACKGROUND

The winged-helix transcriptional repressor (WH) BF-1 gene encodes brain factor 1 (BF-1), also known as foxg1, and is essential for the proliferation of progenitor cells in the cerebral cortex and influences regional patterning in the mammalian telencephalon. WH proteins are a family of putative transcriptional regulators with diverse roles in development, and are characterized by a highly conserved DNA binding structure, the WH domain. BF-1 plays a critical role in the development of the cerebral hemispheres of the brain and targeted disruption of the gene leads to severe defects in the development of telencephalic structures, such as the cerebral cortex and basal ganglia. The loss of BF-1 results in an accelerated rate of neuronal differentiation and the shortening of the neurogenetic period in the embryonic cerebral cortex. BF-1 is expressed by E8.5 in telencephalic progenitors. It may also regulate the response of cerebral cortical progenitors to environmental cues.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FOXG1 (human) mapping to 14q12; Foxg1 (mouse) mapping to 12 B3.

SOURCE

BF-1 (O-22) is a Protein A purified rabbit polyclonal antibody raised against synthetic BF-1 peptide of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

BF-1 (O-22) is recommended for detection of BF-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 BF-1 siRNA (h): sc-43631, BF-1 siRNA (m): sc-141691, BF-1 shRNA Plasmid (h): sc-43631-SH, BF-1 shRNA Plasmid (m): sc-141691-SH, BF-1 shRNA (h) Lentiviral Particles: sc-43631-V and BF-1 shRNA (m) Lentiviral Particles: sc-141691-V.

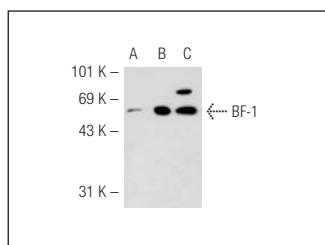
Molecular Weight of BF-1: 51 kDa.

Positive Controls: BF-1 (m): 293T Lysate: sc-118802, Hep G2 cell lysate: sc-2227 or SK-N-SH cell lysate: sc-2410.

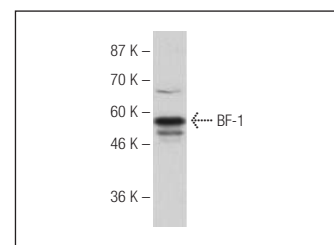
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



BF-1 (O-22): sc-130975. Western blot analysis of BF-1 expression in non-transfected 293T: sc-117752 (A), mouse BF-1 transfected 293T: sc-118802 (B) and SK-N-SH (C) whole cell lysates.



BF-1 (O-22): sc-130975. Western blot analysis of BF-1 expression in Hep G2 whole cell lysate.

STORAGE

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