BACKGROUND

PBF, also known as PTG1IP (pituitary tumor-transforming 1 interacting protein), is a 180 amino acid single-pass type I membrane protein that localizes to both the cytoplasm and the nucleus and contains a coiled-coil domain. Expressed ubiquitously, PBF interacts with PTTG and is thought to facilitate the nuclear translocation of PTTG, thereby allowing the PTTG-dependent transcriptional activation of fibroblast growth factor (FGF). The gene encoding PBF maps to human chromosome 21, which houses approximately 300 genes and comprises nearly 1.5% of the human genome. Chromosome 21-associated disorders include Alzheimer’s disease, amyotrophic lateral sclerosis and, most notably, Down syndrome (also known as trisomy 21).

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: PTTG1IP (human) mapping to 21q22.3; Pttg1ip (mouse) mapping to 10 C1.

SOURCE

PBF (C-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of PBF of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83315 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PBF (C-19) is recommended for detection of PBF 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); non cross-reactive with PTTG or PTTG1.

Suitable for use as control antibody for PBF siRNA (h): sc-91397, PBF siRNA (m): sc-152041, PBF shRNA Plasmid (h): sc-91397-SH, PBF shRNA Plasmid (m): sc-152041-SH, PBF shRNA (h) Lentiviral Particles: sc-91397-V and PBF shRNA (m) Lentiviral Particles: sc-152041-V.

Molecular Weight of PBF: 22 kDa.

Positive Controls: PBF (h3): 293 Lysate: sc-113644 or HeLa whole cell lysate: sc-2200.

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.

DATA

PBF (C-19): sc-83315. Western blot analysis of PBF expression in non-transfected: sc-117752 (A) and human PBF transfected: sc-113644 (B) 293 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.

PROTOCOLS

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