

POU3F4 (K-21): sc-133921

BACKGROUND

The Brn family of transcription factors are found in a highly restricted subset of neurons and are critical to the early embryonic development of the central nervous system. POU3F4 (POU domain, class 3, transcription factor 4), also known as OTF9, DFN3, DFNX2, BRAIN-4 or Brn-4, is a 361 amino acid class III POU domain protein that belongs to the Brn family. Localized to the nucleus, POU3F4 contains one POU-specific domain and one homeobox DNA-binding domain through which it is thought to function as a brain-specific transcription factor that effects neuronal development. Defects in the gene encoding POU3F4 are associated with X-linked deafness type 3 (DFN3), a disorder characterized by both progressive sensorineural deafness and conductive hearing loss caused by stapes gushers (large vestibular aqueducts).

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: POU3F4 (human) mapping to Xq21.1; Pou3f4 (mouse) mapping to X E1.

SOURCE

POU3F4 (K-21) is a Protein A purified rabbit polyclonal antibody raised against synthetic POU3F4 peptide of human origin.

PRODUCT

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

APPLICATIONS

POU3F4 (K-21) is recommended for detection of POU3F4 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

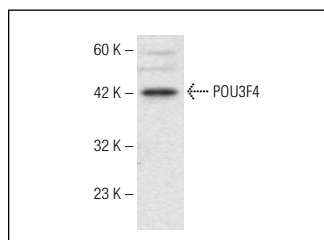
Suitable for use as control antibody for POU3F4 siRNA (h): sc-76201, POU3F4 siRNA (m): sc-76202, POU3F4 shRNA Plasmid (h): sc-76201-SH, POU3F4 shRNA Plasmid (m): sc-76202-SH, POU3F4 shRNA (h) Lentiviral Particles: sc-76201-V and POU3F4 shRNA (m) Lentiviral Particles: sc-76202-V.

Molecular Weight of POU3F4: 39 kDa.

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).

DATA



POU3F4 (K-21): sc-133921. Western blot analysis of POU3F4 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.

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.