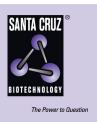SANTA CRUZ BIOTECHNOLOGY, INC.

POU6F2 (H-145): sc-292551

BACKGROUND

Tissue-restricted POU domain transcription factors play roles in cellular differentiation and the development of several organs. POU6F2 (POU class 6 homeobox 2), also known as RPF-1 (retina-derived POU domain factor 1), WT5 or WTSL, is a 683 amino acid nuclear protein expressed exclusively in the central nervous system (CNS). POU6F2 localizes to neurons of the dorsal hypothalamus, as well as retinal cells, where it is thought to function as a transcription factor during early amacrine and ganglion cell differentiation. Existing as two alternatively spliced isoforms, POU6F2 contains one homeobox DNA-binding domain, a single POU-specific domain, and is encoded by a gene that maps to human chromosome 7p14.1. POU6F2 defects are associated with Wilms tumor 5 (WT5).

REFERENCES

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2. Phillips, K. and Luisi, B. 2000. The virtuoso of versatility: POU proteins that flex to fit. J. Mol. Biol. 302: 1023-1039.

3. Perotti, D., et al. 2001. Refinement within single yeast artificial chromosome clones of a minimal region commonly deleted on the short arm of chromosome 7 in Wilms tumours. Genes Chromosomes Cancer 31: 42-47.

4. Perotti, D., et al. 2004. Germline mutations of the POU6F2 gene in Wilms tumors with loss of heterozygosity on chromosome 7p14. Hum. Mutat. 24: 400-407.

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CHROMOSOMAL LOCATION

Genetic locus: POU6F2 (human) mapping to 7p14.1; Pou6f2 (mouse) mapping to 13 A2.

SOURCE

POU6F2 (H-145) is a rabbit polyclonal antibody raised against amino acids 9-153 mapping near the N-terminus of POU6F2 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.

STORAGE

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

APPLICATIONS

POU6F2 (H-145) is recommended for detection of POU6F2 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).

POU6F2 (H-145) is also recommended for detection of POU6F2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for POU6F2 siRNA (h): sc-89556, POU6F2 siRNA (m): sc-152394, POU6F2 shRNA Plasmid (h): sc-89556-SH, POU6F2 shRNA Plasmid (m): sc-152394-SH, POU6F2 shRNA (h) Lentiviral Particles: sc-89556-V and POU6F2 shRNA (m) Lentiviral Particles: sc-152394-V.

Molecular Weight of POU6F2: 72 kDa.

Positive Controls: Y79 cell lysate: sc-2240.

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.

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.