

Pax-3 (C-20): sc-34916

BACKGROUND

Pax genes contain paired domains that share strong homology to genes in *Drosophila* which are involved in programming early development. The product of the PAX3 gene is a DNA-binding protein expressed during early neurogenesis. Pax-3 is a protein containing both a paired domain and a paired-type homeodomain. During early neurogenesis, Pax-3 expression is limited to mitotic cells in the ventricular zone of the developing spinal cord and to distinct regions in the hindbrain, midbrain and diencephalon. In 10-12 day embryos, expression of Pax-3 is also seen in neural crest cells of the developing spinal ganglia, the craniofacial mesectoderm and in limb mesenchyme. Mutations in the MITF and Pax-3 genes, encoding transcription factors, are responsible for Waardenburg syndrome II (WSII) and WSI/WSIII, respectively.

CHROMOSOMAL LOCATION

Genetic locus: PAX3 (human) mapping to 2q36.1; Pax3 (mouse) mapping to 1 C4.

SOURCE

Pax-3 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Pax-3 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-34916 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-34916 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Pax-3 (C-20) is recommended for detection of Pax-3 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).

Pax-3 (C-20) is also recommended for detection of Pax-3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Pax-3 siRNA (h): sc-38747, Pax-3 siRNA (m): sc-38748, Pax-3 shRNA Plasmid (h): sc-38747-SH, Pax-3 shRNA Plasmid (m): sc-38748-SH, Pax-3 shRNA (h) Lentiviral Particles: sc-38747-V and Pax-3 shRNA (m) Lentiviral Particles: sc-38748-V.

Pax-3 (C-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

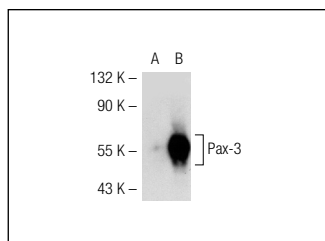
Molecular Weight of Pax-3: 56 kDa.

Positive Controls: Pax-3 (m): 293T Lysate: sc-122398.

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



Pax-3 (C-20): sc-34916. Western blot analysis of Pax-3 expression in non-transfected: sc-117752 (A) and mouse Pax-3 transfected: sc-122398 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Kablar, B. 2004. MyoD-lacZ transgenes are early markers in the neural retina, but MyoD function appears to be inhibited in the developing retinal cells. *Int. J. Dev. Neurosci.* 22: 215-224.
- Chen, A.E., et al. 2005. Protein kinase A signalling via CREB controls myogenesis induced by Wnt proteins. *Nature* 433: 317-322.
- Liu, F., et al. 2013. TBX2 expression is regulated by PAX3 in the melanocyte lineage. *Pigment Cell Melanoma Res.* 26: 67-77.

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.

MONOS
Satisfaction
Guaranteed

Try **Pax-3 (F-2): sc-376204** or **Pax-3 (A-5): sc-376215**, our highly recommended monoclonal alternatives to Pax-3 (C-20).