

Oct-6 (C-20): sc-11661

BACKGROUND

POU homeodomain proteins are transcriptional regulators that function in various developmental processes (e.g. cell division, differentiation, specification and survival of specific cell types) and participate in the determination of cell fate. The POU transcription factor Oct-6 (also designated SCIP and Tst-1) is expressed by late embryonic Schwann cells of the peripheral nervous system and is also expressed by nonmyelinating Schwann cells in adults. Oct-6 is strongly upregulated in promyelinating cells because it is required for the timely differentiation of promyelinating cells into myelinating cells. Oct-6 functions during myelination and is required for the proper downregulation of its own gene when myelination proceeds. c-Myc can act synergistically with the POU domain of Oct-6 to produce myelin disease pathogenesis in the mammalian central nervous system.

CHROMOSOMAL LOCATION

Genetic locus: POU3F1 (human) mapping to 1p34.3; Pou3f1 (mouse) mapping to 4 D2.2.

SOURCE

Oct-6 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Oct-6 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-11661 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-11661 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Oct-6 (C-20) is recommended for detection of Oct-6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Oct-6 (C-20) is also recommended for detection of Oct-6 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Oct-6 siRNA (h): sc-38774, Oct-6 siRNA (m): sc-38775, Oct-6 shRNA Plasmid (h): sc-38774-SH, Oct-6 shRNA Plasmid (m): sc-38775-SH, Oct-6 shRNA (h) Lentiviral Particles: sc-38774-V and Oct-6 shRNA (m) Lentiviral Particles: sc-38775-V.

Oct-6 (C-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Oct-6: 45 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or HL-60 whole cell lysate: sc-2209.

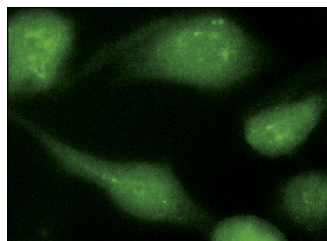
RESEARCH USE

For research use only, not for use in diagnostic procedures.

STORAGE

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

DATA



Oct-6 (C-20): sc-11661. Immunofluorescence staining of methanol-fixed SK-MEL-28 cells showing nuclear localization.

SELECT PRODUCT CITATIONS

1. Torii, M., et al. 2005. Dissociation of corticothalamic and thalamocortical axon targeting by an EphA7-mediated mechanism. *Neuron* 48: 563-575.
2. Wu, X., et al. 2011. Spermatogonial stem cell self-renewal requires ETV5-mediated downstream activation of Brachyury in mice. *Biol. Reprod.* 85: 1114-1123.
3. Iwafuchi-Doi, M., et al. 2011. The Pou5f1/Pou3f-dependent but SoxB-independent regulation of conserved enhancer N2 initiates Sox2 expression during epiblast to neural plate stages in vertebrates. *Dev. Biol.* 352: 354-366.
4. Homma, S., et al. 2011. Peripheral nerve pathology, including aberrant Schwann cell differentiation, is ameliorated by doxycycline in a laminin- α 2-deficient mouse model of congenital muscular dystrophy. *Hum. Mol. Genet.* 20: 2662-2672.
5. Iwafuchi-Doi, M., et al. 2011. The Pou5f1/Pou3f-dependent but SoxB-independent regulation of conserved enhancer N2 initiates Sox2 expression during epiblast to neural plate stages in vertebrates. *Dev. Biol.* 352: 354-366.
6. Inoue, F., et al. 2012. Gbx2 directly restricts Otx2 expression to forebrain and midbrain, competing with class III POU factors. *Mol. Cell. Biol.* 32: 2618-2627.
7. Doddrell, R.D., et al. 2013. Loss of SOX10 function contributes to the phenotype of human Merlin-null schwannoma cells. *Brain* 136: 549-563.

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Try **Oct-6 (B-7): sc-376143** or **Oct-6 (A-8): sc-376093**, our highly recommended monoclonal alternatives to Oct-6 (C-20).