

Oct-2 (H-120): sc-25400

BACKGROUND

POU domain proteins contain a bipartite DNA-binding domain divided by a flexible linker that enables them to adopt various monomer configurations on DNA. The versatility of POU protein operation is additionally conferred at the dimerization level. The POU dimer from the OCT1 gene formed on the palindromic OCT factor recognition element, or PORE (ATTTGAAATGCAAAT), could recruit the transcriptional coactivator OBF1. Studies of tissue-specific expression of immunoglobulin promoters demonstrate the importance of an octamer, ATTTGCAT, and the proteins that bind to it. This is a regulatory element important for tissue- and cell-specific transcription as well as for transcription of a number of housekeeping genes. Oct-1 encodes one protein, NF-A1, which is found in nuclear extracts from all cell types and thus is not specific to lymphoid cells as is the protein NF-A2, which is encoded by Oct-2.

CHROMOSOMAL LOCATION

Genetic locus: POU2F2 (human) mapping to 19q13.2; Pou2f2 (mouse) mapping to 7 A3.

SOURCE

Oct-2 (H-120) is a rabbit polyclonal antibody raised against amino acids 360-479 of Oct-2 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-25400 X, 200 µg/0.1 ml.

RESEARCH USE

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

APPLICATIONS

Oct-2 (H-120) is recommended for detection of Oct-2 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).

Oct-2 (H-120) is also recommended for detection of Oct-2 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for Oct-2 siRNA (h): sc-36121, Oct-2 siRNA (m): sc-36122, Oct-2 shRNA Plasmid (h): sc-36121-SH, Oct-2 shRNA Plasmid (m): sc-36122-SH, Oct-2 shRNA (h) Lentiviral Particles: sc-36121-V and Oct-2 shRNA (m) Lentiviral Particles: sc-36122-V.

Oct-2 (H-120) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Oct-2A: 60 kDa.

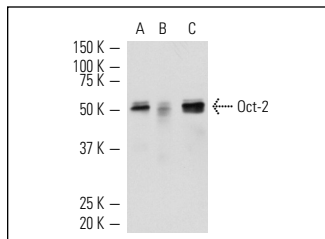
Molecular Weight of Oct-2B: 75 kDa.

Positive Controls: Ramos nuclear extract: sc-2153, U-698-M whole cell lysate: sc-364799 or Raji whole cell lysate: sc-364236.

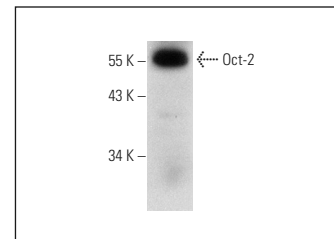
RECOMMENDED SECONDARY REAGENTS

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



Oct-2 (H-120): sc-25400. Western blot analysis of Oct-2 expression in U-698-M whole cell lysate (A), Ramos nuclear extract (B) and Raji whole cell lysate (C).



Oct-2 (H-120): sc-25400. Western blot analysis of Oct-2 expression in Ramos whole cell lysate.

SELECT PRODUCT CITATIONS

1. Camos, S., et al. 2014. Oct-2 transcription factor binding activity and expression up-regulation in rat cerebral ischaemia is associated with a diminution of neuronal damage *in vitro*. *Neuromolecular. Med.* 16: 332-349.

STORAGE

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

PROTOCOLS

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



Try **Oct-2 (PT2): sc-56822** or **Oct-2 (F-5): sc-377475**, our highly recommended monoclonal alternatives to Oct-2 (H-120). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Oct-2 (PT2): sc-56822**.