

Oct-2 (A-20): sc-31980

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 Oct-1 gene formed on the palindromic Oct factor recognition element, or PORE (ATTGAAATGCAAAT), 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. The genes Oct-1 and Oct-2 map to human chromosomes 1q22-q23 and 19q13.2, respectively.

CHROMOSOMAL LOCATION

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

SOURCE

Oct-2 (A-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus 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-31980 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-31980 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Oct-2 (A-20) 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 (A-20) 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 (A-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Oct-2A: 60 kDa.

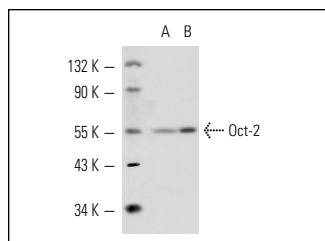
Molecular Weight of Oct-2B: 75 kDa.

Positive Controls: U-937 cell lysate: sc-2239, Ramos nuclear extract: sc-2153 or Daudi cell lysate: sc-2415.

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



Oct-2 (A-20): sc-31980. Western blot analysis of Oct-2 expression in U-937 (A) and Ramos (B) nuclear extracts.

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.

MONOS
Satisfaction
Guaranteed

Try **Oct-2 (PT2): sc-56822** or **Oct-2 (F-5): sc-377475**, our highly recommended monoclonal alternatives to Oct-2 (A-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Oct-2 (PT2): sc-56822**.