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 promyelin cells because it is required for the timely differentiation of promyelin 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.

REFERENCES


CHROMOSOMAL LOCATION

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

SOURCE

Oct-6 (A-8) is a mouse monoclonal antibody raised against amino acids 111-160 mapping within an internal region of Oct-6 of human origin.

RESEARCH USE

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

APPLICATIONS

Oct-6 (A-8) is recommended for detection of Oct-6 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunoaffluorescence (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 (A-8) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Oct-6: 46 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, Hep G2 cell lysate: sc-2227 or human testis extract: sc-363781.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG1 kappa light chain in 1 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-376093 X, 200 µg/0.1 ml.

Applications:

Each vial contains 200 µg IgG1 kappa light chain in 1 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-376093 X, 200 µg/0.1 ml.

STORAGE

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