

OCT6 (H-6): sc-390056

BACKGROUND

Organic cation transporters (OCT) are expressed in the plasma membrane of epithelial cells from a wide range of tissues, where they function in the elimination of endogenous amines and cationic drugs as well as other exogenous xenobiotics. The structure of OCT family member proteins consists of a 12-transmembrane-domain structure and a large extracellular hydrophilic loop. In humans, OCT1 is primarily expressed in the liver, while OCT2 is expressed in the kidney. OCT3 is expressed in the placenta, skeletal muscle, prostate, aorta and liver. OCT6 is highly expressed in testis and fetal liver. OCT6 also displays high expression in human hematopoietic tissues, including CD34⁺ cells and leukemias making OCT6 a potential therapeutic target for the treatment of leukemia.

REFERENCES

1. Gorboulev, V., et al. 1997. Cloning and characterization of two human polyspecific organic cation transporters. *DNA Cell Biol.* 16: 871-881.
2. Koepsell, H. 1998. Organic cation transporters in intestine, kidney, liver, and brain. *Annu. Rev. Physiol.* 60: 246-266.
3. Dresser, M.J., et al. 1999. Molecular and functional characteristics of clones human organic cation transporters. *Pharm. Biotechnol.* 12: 441-469.
4. Verhaagh, S., et al. 1999. Cloning of the mouse and human solute carrier 22a3 (Slc22a3/SLC22A3) identifies a conserved cluster three organic cation transporters on mouse chromosome 17 and human 6q26-q27. *Genomics* 55: 209-218.
5. Gong, S., et al. 2002. Identification of OCT6 as a novel organic cation transporter preferentially expressed in hematopoietic cells and leukemias. *Exp. Hematol.* 30: 1162-1169.

CHROMOSOMAL LOCATION

Genetic locus: SLC22A16 (human) mapping to 6q21; Slc22a16 (mouse) mapping to 10 B1.

SOURCE

OCT6 (H-6) is a mouse monoclonal antibody raised against amino acids 33-145 mapping near the C-terminus of OCT6 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

OCT6 (H-6) is available conjugated to agarose (sc-390056 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390056 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390056 PE), fluorescein (sc-390056 FITC), Alexa Fluor® 488 (sc-390056 AF488), Alexa Fluor® 546 (sc-390056 AF546), Alexa Fluor® 594 (sc-390056 AF594) or Alexa Fluor® 647 (sc-390056 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390056 AF680) or Alexa Fluor® 790 (sc-390056 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

OCT6 (H-6) is recommended for detection of OCT6 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)], 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).

Suitable for use as control antibody for OCT6 siRNA (h): sc-95071, OCT6 siRNA (m): sc-150172, OCT6 shRNA Plasmid (h): sc-95071-SH, OCT6 shRNA Plasmid (m): sc-150172-SH, OCT6 shRNA (h) Lentiviral Particles: sc-95071-V and OCT6 shRNA (m) Lentiviral Particles: sc-150172-V.

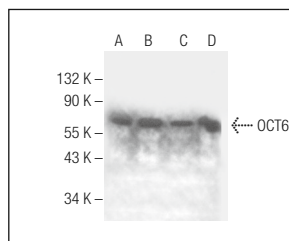
Molecular Weight of OCT6: 58 kDa.

Positive Controls: CCRF-CEM cell lysate: sc-2225, Jurkat whole cell lysate: sc-2204 or AML-193 whole cell lysate: sc-364182.

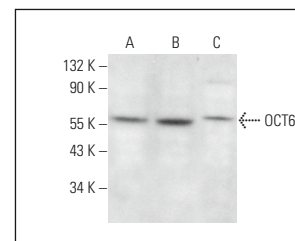
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



OCT6 (H-6): sc-390056. Western blot analysis of OCT6 expression in Jurkat (A), CCRF-CEM (B), AML-193 (C) and ALL-SIL (D) whole cell lysates.



OCT6 (H-6): sc-390056. Western blot analysis of OCT6 expression in CCRF-CEM (A), Jurkat (B) and TK-1 (C) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Kitamura, H., et al. 2017. Ubiquitin-specific protease 2 modulates the lipopolysaccharide-elicited expression of proinflammatory cytokines in macrophage-like HL-60 cells. *Mediators Inflamm.* 2017: 6909415.

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.