

Oct4 Recombinant Rabbit mAb

Catalog Number: bsm-52002R

Target Protein: Oct4

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Recombinant

Clone No.: 2D5

Isotype: IgG

Applications: WB (1:500-2000), IHC-P (1:100-500), IHC-F (1:50-200), IF (1:100-500), ICC/IF (1:50-200)

Reactivity: Human, Mouse (predicted:Rat)

Predicted MW: 39 kDa

Entrez Gene: 5460

Swiss Prot: Q01860

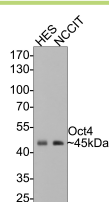
Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

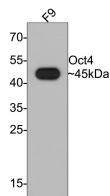
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: This gene encodes a transcription factor containing a POU homeodomain. This transcription factor plays a role in embryonic development, especially during early embryogenesis, and it is necessary for embryonic stem cell pluripotency. A translocation of this gene with the Ewing's sarcoma gene, t(6;22)(p21;q12), has been linked to tumor formation. Alternative splicing, as well as usage of alternative translation initiation codons, results in multiple isoforms, one of which initiates at a non-AUG (CUG) start codon. Related pseudogenes have been identified on chromosomes 1, 3, 8, 10, and 12. [provided by RefSeq].

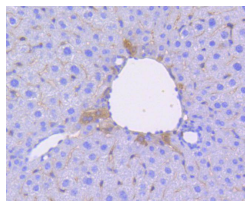
VALIDATION IMAGES



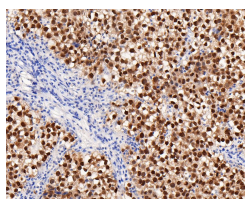
Western blot analysis of Oct4 on different lysates with Rabbit anti-Oct4 antibody (bsm-52002R) at 1/500 dilution. Lane 1: HES cell lysate Lane 2: NCCIT cell lysate Lysates/proteins at 10 ̑g/Lane. Predicted band size: 39 kDa Observed band size: 45 kDa Exposure time: 1 minute; 10% SDS-PAGE gel. Proteins were transferred to a PVDF membrane and blocked with 5% NFDm/TBST for 1 hour at room temperature. The primary antibody (bsm-52002R) at 1/500 dilution was used in 5% NFDm/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody at 1:300,000 dilution was used for 1 hour at room temperature.



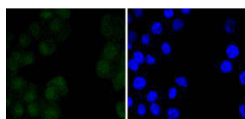
Western blot analysis of Oct4 on F9 cell lysates with Rabbit anti-Oct4 antibody (bsm-52002R) at 1/1,000 dilution. Lysates/proteins at 10 ̑g/Lane. Predicted band size: 39 kDa Observed band size: 45 kDa Exposure time: 2 minutes; 12% SDS-PAGE gel. Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (bsm-52002R) at 1/1,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody at 1:300,000 dilution was used for 1 hour at room temperature.



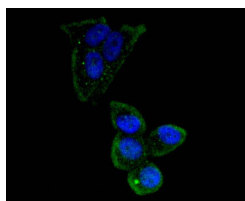
Immunohistochemical analysis of paraffin-embedded mouse liver tissue using anti-Oct4 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (bsm-52002R, 1/50) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



Immunohistochemical analysis of paraffin-embedded human seminoma tissue with Rabbit anti-Oct4 antibody (ET1612-20) at 1/4,000 dilution. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (bsm-52002R) at 1/4,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



ICC staining of Oct4 in N2A cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with the primary antibody (bsm-52002R, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).



ICC staining of Oct4 in MCF-7 cells (green). Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with the primary antibody (bsm-52002R, 1/50) for 1 hour at room temperature, washed with PBS. Alexa Fluor®488 Goat anti-Rabbit IgG was used as the secondary antibody at 1/1,000 dilution. The nuclear counter stain is DAPI (blue).

PRODUCT SPECIFIC PUBLICATIONS

[IF=2.13] Jijiong Zhang. et al. CircRNA hsa_circ_0075048 promotes the malignant progression of non-small cell lung cancer by up-regulating HMGB2 expression via targeting miR-1225-5p.. HISTOL HISTOPATHOL. 2022 Nov;:18551-18551 WB ; Human . 36416408