Data Sheet (Cat.No.TMAC-02915)

Anti-OCT4 Antibody (4Q101)

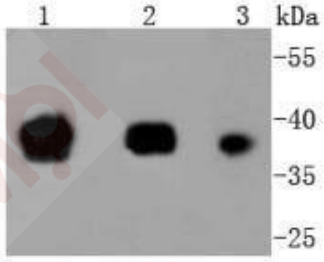
Product Details

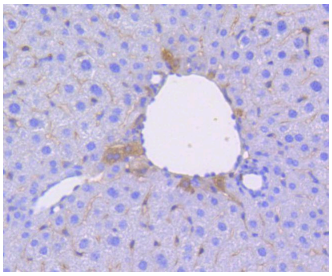
Ig Type:	IgG
Reactivity:	Human,Mouse
Conjugation:	Unconjugated
Molecular Weight:	Theoretical: 39 kDa.
Clone:	4Q101
Purification:	ProA affinity purified

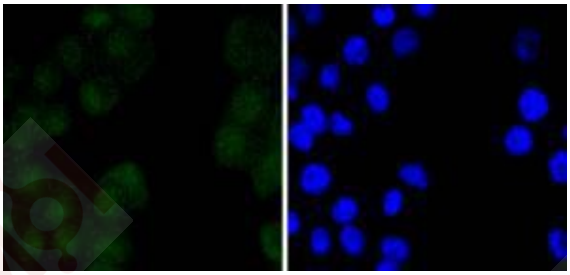
Applications

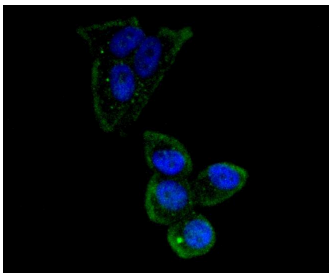
Verified Activity:

1. Western blot analysis of Oct4 on different lysates using anti-Oct4 antibody at 1/1,000 dilution. Positive control: Lane 1: F9, Lane 2: NCCIT, Lane 3: hES.
2. Immunohistochemical analysis of paraffin-embedded mouse liver tissue using anti-Oct4 antibody. Counter stained with hematoxylin.
3. ICC staining Oct4 in N2A cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.
4. ICC staining Oct4 in MCF-7 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.









Application: ChIP,ICC/IF,IHC,IP,WB

Recommended: WB: 1:1000-5000; IHC: 1:50-200; ICC/IF: 1:50-200

Properties

Stability & Storage: Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.

Shipping: Shipping with blue ice.

Antigen Details

Immunogen: Recombinant Protein

Uniprot ID: Q01860

Research Background

POU5F1 (POU domain, class 5, transcription factor 1), also known as octamer-binding transcription factor-3 (Oct-3, OTF3), octamer-binding transcription factor-4 (Oct-4, Otf-4) and Oct-3/4, modulates embryonic stem (ES) cell populations by influencing lineage commitment. Oct-3/4 sustains stem-cell self-renewal and differentiation pathways. Transcription factors containing the POU homeodomain regulate tissue-specific gene expression in lymphoid and pituitary differentiation and in early mammalian development. Oct-3/4 is capable of inducing rapid proliferation and tumorigenic properties of ES cells through activation of the UTF1 gene. In humans, two Oct-3/4 isoforms contribute to influencing the undifferentiated phenotype of ES cells. Oct-3/4 pseudogenes localizing to human chromosomes 10 and 8 are reported to be transcribed in certain cancer cell lines and tissues.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481