

OriGene Technologies, Inc.

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Product datasheet for TA500035

Oct4 (POU5F1) Mouse Monoclonal Antibody [Clone ID: OTI9B7]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI9B7

Applications: IF, IHC, WB

Recommend Dilution: WB 1:5000, IHC 1:50, IF 1:100

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human POU5F1 (NP_002692) produced in E.coli.

Formulation: PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 0.25 mg/ml

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Predicted Protein Size: 38.4 kDa

Gene Name: POU class 5 homeobox 1

Database Link: NP 002692 Entrez Gene 5460 Human

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.

Synonyms: Oct-3; Oct-4; OCT3; OCT4; OTF-3; OTF4

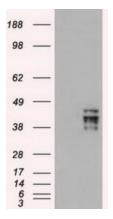
Protein Families: Adult stem cells, Cancer stem cells, Embryonic stem cells, Induced pluripotent stem cells,

Stem cell - Pluripotency, Transcription Factors

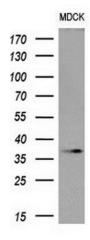




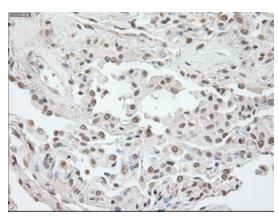
Product images:



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY OCT4 ([RC211998], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-OCT4. Positive lysates [LY400950] (100ug) and [LC400950] (20ug) can be purchased separately from OriGene.

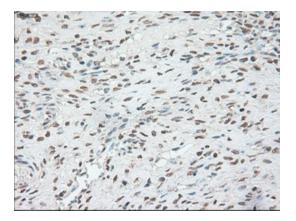


Western blot analysis of extracts (10ug) from 1 cell line by using anti-OCT4 monoclonal antibody at 1:200 dilution.

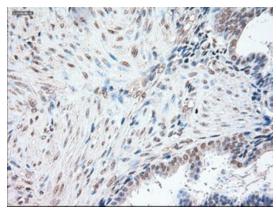


Immunohistochemical staining of paraffinembedded Human lung tissue within the normal limits using anti-OCT4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500035)

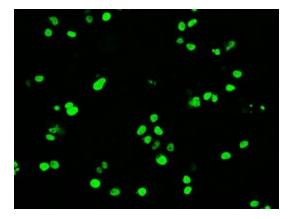




Immunohistochemical staining of paraffinembedded Human Ovary tissue within the normal limits using anti-OCT4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500035)



Immunohistochemical staining of paraffinembedded Human endometrium tissue within the normal limits using anti-OCT4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500035)



Anti-OCT4 mouse monoclonal antibody (TA500035) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY OCT4 ([RC211998]).