

## 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   |
| Recommended 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)   |
| Conjugation:            | Unconjugated  |
| Storage:                | Store at -20°C as received.   |
| Stability:              | Stable for 12 months from date of receipt.  |
| Predicted Protein Size: | 38.4 kDa  |
| Gene Name:              | POU class 5 homeobox 1  |
| Database Link:          | <a href="#">NP_002692</a><br><a href="#">Entrez Gene 5460 Human Q01860</a>  |
| 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. |

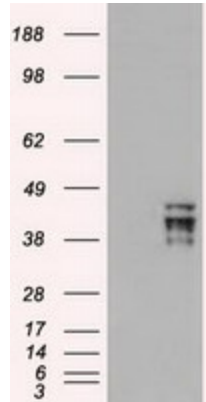


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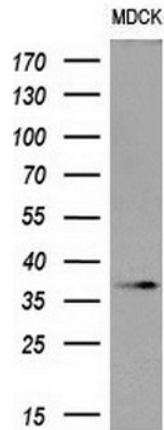
**Synonyms:** Oct-3; Oct-4; OCT3; OCT4; OTF-3; OTF3; OTF4

**Protein Families:** Adult stem cells, Cancer stem cells, Embryonic stem cells, Induced pluripotent stem cells, Stem cell - Pluripotency, Transcription Factors

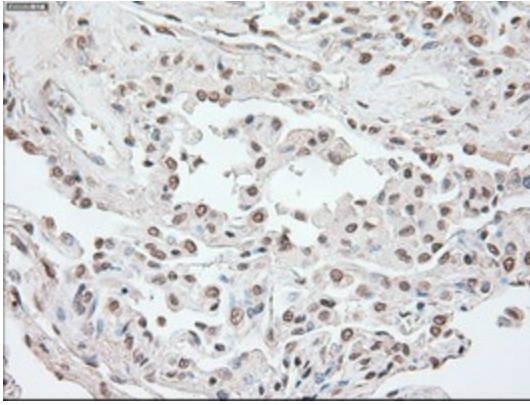
**Product images:**



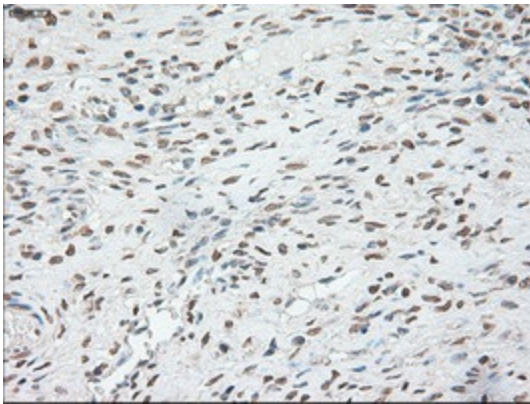
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY OCT4 (Cat# [RC211998], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-OCT4(Cat# TA500035). Positive lysates [LY400950] (100ug) and [LC400950] (20ug) can be purchased separately from OriGene.



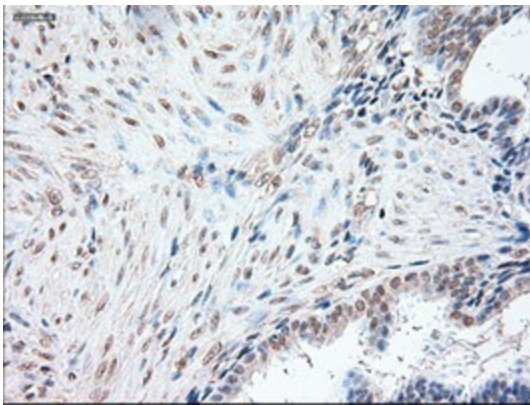
Western blot analysis of extracts (10ug) from 1 cell line by using anti-OCT4 monoclonal antibody at 1:200 dilution.



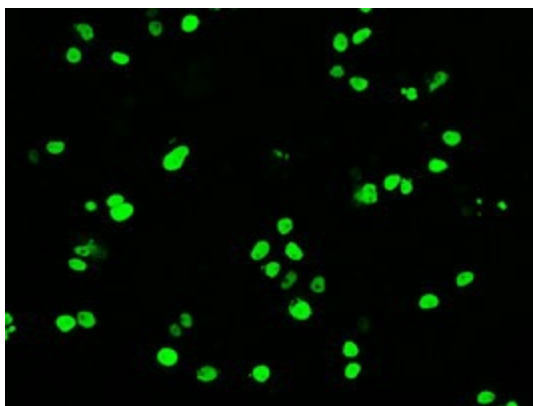
Immunohistochemical staining of paraffin-embedded Human lung tissue within the normal limits using anti-OCT4 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500035)



Immunohistochemical staining of paraffin-embedded 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 paraffin-embedded 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]).