



**Category:** Monoclonal Antibodies

**Product Name:** Mouse Monoclonal Antibody to Oct4

**Catalog Number:** MAB-606020291

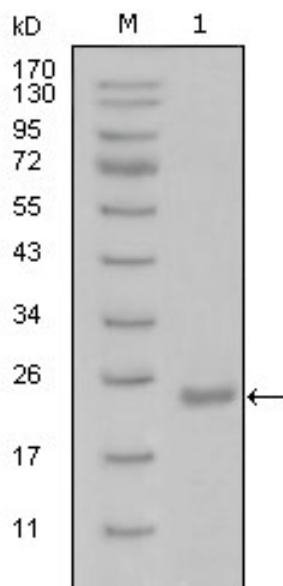


Figure 1: Western blot analysis using Oct4 mouse mAb against recombinant Oct4 protein with Trx tag (1).

Lot#:  
Clone#: 1D10H6  
Host and isotype: Mouse IgG1  
Size: 0.1ml  
MW: 38.5kDa  
Aliases: OCT3; OTF3; OTF4;  
MGC22487; POU5F1  
Entrez Gene: 5460  
Species reactivity: Human

**Description** Oct4: octamer-binding transcription factor-4 (Oct-4, Otf-4) and Oct-3/4, also known as POU5F1(POU class 5 homeobox 1), octamerbinding transcription factor-3 (Oct-3, Otf-3), modulates embryonic stem (ES) cell populations by influencing lineage commitment. Entrez Protein NP\_002692. Oct-3/4 sustains stem-cell selfrenewal 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.

**Immunogen** Purified recombinant fragment of Oct4 (aa193-360) expressed in E. Coli.

**Application** Western Blotting: 1/500 - 1/2000.

ELISA: Propose dilution 1/10000.

Not yet tested in other applications.

Determining optimal working dilutions by titration test.

**Formulation** Ascitic fluid containing 0.03% sodium azide.

**Storage** Store at 4iæ, for long term storage, store at -20iæ.

**Related product** 1. Mab-2008046, Mouse Monoclonal Antioby to cMYC;

2. Mab-2008113, Mouse Monoclonal Antioby to LIN28;

3. Mab-2009011, Mouse Monoclonal Antioby to NANOG.

**References** 1. Cells Tissues Organs. 2006;184(3-4):105-16.

2. Int J Cancer. 2007 Apr 1;120(7):1598-602.

**For Research Use Only**

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