

## Product datasheet for **TA506798**

### **Oct4 (POU5F1) Mouse Monoclonal Antibody [Clone ID: OTI7H1]**

#### **Product data:**

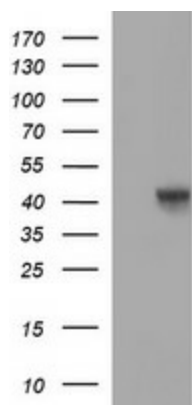
<b>Product Type:</b>	Primary Antibodies
<b>Clone Name:</b>	OTI7H1
<b>Applications:</b>	IF, WB
<b>Recommended Dilution:</b>	WB 1:200~1000, IF: 1:100
<b>Reactivity:</b>	Human, Mouse, Rat
<b>Host:</b>	Mouse
<b>Isotype:</b>	IgG1
<b>Clonality:</b>	Monoclonal
<b>Immunogen:</b>	Full length human recombinant protein of human POU5F1(NP_002692) produced in HEK293T cell.
<b>Formulation:</b>	PBS (PH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
<b>Concentration:</b>	1 mg/ml
<b>Purification:</b>	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
<b>Storage:</b>	Store at -20°C as received.
<b>Stability:</b>	Stable for 12 months from date of receipt.
<b>Predicted Protein Size:</b>	38.4 kDa
<b>Gene Name:</b>	POU class 5 homeobox 1
<b>Database Link:</b>	<u><a href="#">NP_002692 Entrez Gene</a></u> <u><a href="#">18999 MouseEntrez Gene</a></u> <u><a href="#">294562 RatEntrez Gene</a></u> <u><a href="#">5460 Human</a></u>
<b>Background:</b>	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, Mar 2010]
<b>Synonyms:</b>	Oct-3; Oct-4; OCT3; OCT4; OTF-3; OTF3; OTF4



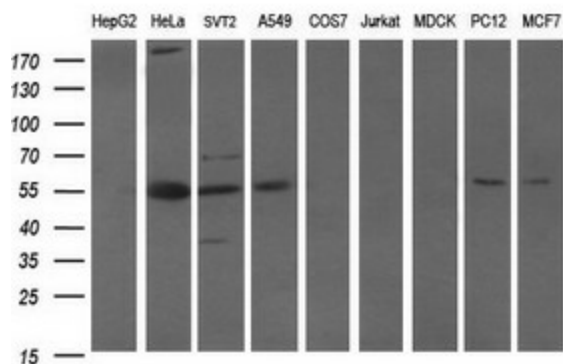
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**Protein Families:** Adult stem cells, Cancer stem cells, Embryonic stem cells, Induced pluripotent stem cells, Stem cell - Pluripotency, Transcription Factors

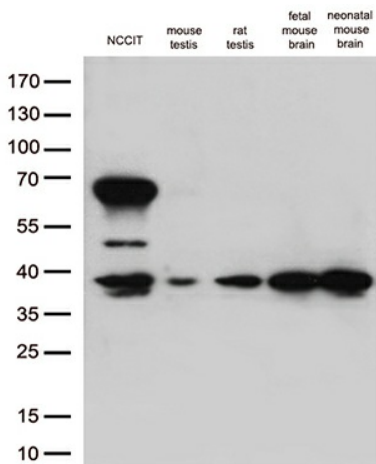
**Product images:**



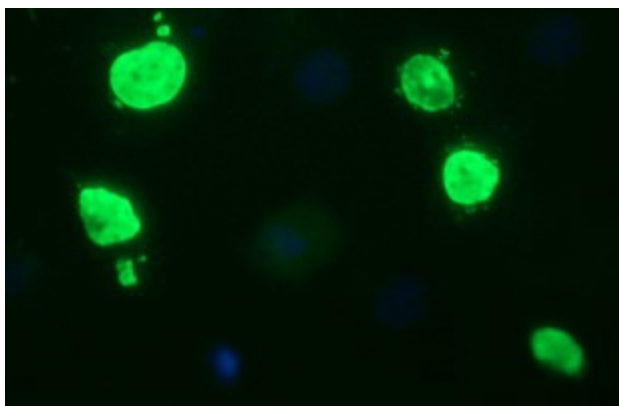
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY POU5F1 ([RC211998], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-POU5F1. Positive lysates [LY400950] (100ug) and [LC400950] (20ug) can be purchased separately from OriGene.



Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-POU5F1 monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).



Western blot analysis of extracts (35ug) from 1 cell line lysate and 4 tissue lysates by using anti-POU5F1 monoclonal antibody (1:250).



Anti-POU5F1 mouse monoclonal antibody (TA506798) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY POU5F1 ([RC211998]) (1:100).



Immunofluorescent staining of CRL1973 cells using anti-POU5F1 mouse monoclonal antibody (TA506798) (1:100).