

# **Product datasheet for TA336803**

#### OriGene Technologies, Inc.

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## Oct4 (POU5F1) Mouse Monoclonal Antibody [Clone ID: 7E7]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: 7E7

**Applications:** ELISA, FC, ICC/IF, WB

**Recommended Dilution:** Flow Cytometry: 1:200-1:400, ELISA: 1:10000, Immunocytochemistry/ Immunofluorescence:

1:200-1:1000, Western Blot: 1:500-1:2000

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Synthetic peptide derived from an internal portion of human OCT4. [UniProt# Q01860]

**Formulation:** Preservative: 0.05% Sodium Azide. Aliquot and store at -20C or -80C. Avoid freeze-thaw

cycles.

Concentration: lot specific

Purification: Ascites

**Conjugation:** Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Predicted Protein Size:** 45 kDa

**Gene Name:** POU class 5 homeobox 1

Database Link: NP 002692

Entrez Gene 5460 Human

O01860





Background:

The OCT4 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). Tissue specificity: Expressed in developing brain. Highest levels found in specific cell layers of the cortex, the olfactory bulb, the hippocampus and the cerebellum. Low levels of expression in adult tissues.

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

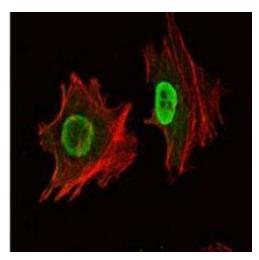
Note: This OCT4 (7E7) antibody is useful for Western Blot, ELISA, Flow Cytometry and

Immunocytochemistry/Immunofluorescence.

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

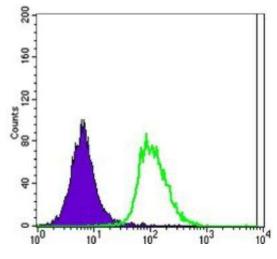
Stem cell - Pluripotency, Transcription Factors

### **Product images:**

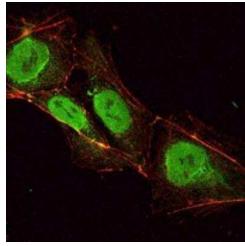


Immunocytochemistry/Immunofluorescence: OCT4 Antibody (7E7) TA336803 - Analysis of NTERA-2 cells using OCT4 mouse mAb (green). Actin filaments have been labeled with Alexa Fluor-555 phalloidin (red).

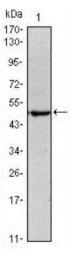




Flow Cytometry: OCT4 Antibody (7E7) TA336803 - Flow cytometric analysis of Jurket cells using OCT4 mouse mAb (green) and negative control (purple).



Immunocytochemistry/Immunofluorescence: OCT4 Antibody (7E7) TA336803 - Analysis of NTERA-2 cells using OCT4 mouse mAb (green). Actin filaments have been labeled with Alexa Fluor-555 phalloidin (red).



Western Blot: OCT4 Antibody (7E7) TA336803 -Analysis using OCT4 mouse mAb against NTERA-2 cell lysate.