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## **OCT4 (1D10) Antibody**

**Subcategory:** Mouse Monoclonal Antibody

**Cat. No.:** 252840

**Unit:** 0.1 ml

**Description:**

Oct4 (Octamer-binding transcription factor-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. Oct-3/4 sustains stem-cell self renewal 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.

**Isotype:** Mouse IgG1

**Applications:** WB

**Species Reactivity:** H

**Format:** Each vial contains 0.1 ml ascitic fluid with 0.03% sodium azide.

**Alternate Names:** POU domain, class 5, transcription factor 1; Octamer-binding protein 3; Oct-3; Octamer-binding protein 4; Oct-4; Octamer-binding transcription factor 3; OTF-3; OCT3; OCT4; OTF3; POU5F1

**Accession No.:** Q01860

**Antigen:** Purified recombinant fragment of Oct4(aa193-360) expressed in E. coli.

**Application Notes:** WB: 1:500-1:2000;

**Storage:** Store at 4°C for short term use only. Store at -20°C for storage over 1 month. Product is guaranteed 6 months from the date of shipment.

For research use only, not for diagnostic or therapeutic procedures.