



## OCT4 Polyclonal Antibody

E91481

**Catalog Number:** E91481**Amount:** 100ul

**Background:** Oct-4 (POU5F1) is a transcription factor highly expressed in undifferentiated embryonic stem cells and embryonic germ cells (1). A network of key factors that includes Oct-4, Nanog, and Sox2 is necessary for the maintenance of pluripotent potential, and downregulation of Oct-4 has been shown to trigger cell differentiation (2,3). Research studies have demonstrated that Oct-4 is a useful germ cell tumor marker (4). Oct-4 exists as two splice variants, Oct-4A and Oct-4B (5). Recent studies have suggested that the Oct-4A isoform has the ability to confer and sustain pluripotency, while Oct-4B may exist in some somatic, non-pluripotent cells (6,7).

**Species:** Rabbit**Isotype:** IgG

**Storage/Stability:** Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

**Synonyms:** POU5F1;MGC22487; OCT3; OCT4; OTF3; OTF4**Immunogen:** Fusion protein of human OCT4**Purification:** Affinity purification**Reactivity:** H M R**Applications:** WB IHC IF IP**Molecular Weight:** 39kDa**Swiss-Prot No. :** Q01860**Gene ID:** 5460

**References:** 1. Looijenga, L.H. et al. (2003) Cancer Res 63, 2244-50. 2. Pesce, M. and Schöler, H.R. (2001) Stem Cells 19, 271-278. 3. Pan, G. and Thomson, J.A. (2007) Cell Res 17, 42-9. 4. Cheng, L. et al. (2007) J Pathol 211, 1-9. 5. Takeda, J. et al. (1992) Nucleic Acids Res 20, 4613-20. 6. Cauffman, G. et al. (2006) Stem Cells 24, 2685-91. 7. Lee, J. et al. (2006) J Biol Chem 281, 33554-65.

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