

Rabbit anti-Human OCT4 (OCT3) Polyclonal Antibody | anti-POU5F1 antibody

OCT4 (OCT3) Antibody (N-term)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA287250	Rabbit	Human	Immunofluorescence, ELISA, Western Blot

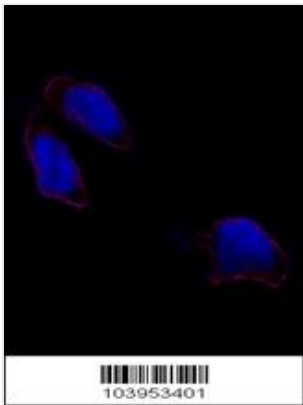
PRODUCT SYNONYMS

OCT4 (OCT3); Polyclonal Antibody; OCT4 (OCT3) Antibody (N-term); 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; POU5F1; OCT3; OCT4; OTF3; anti-POU5F1 antibody

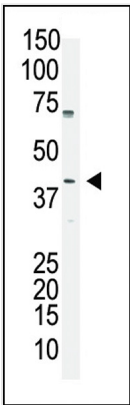
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This OCT4 (OCT3) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human OCT4 (OCT3).
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS)precipitation followed by dialysis against PBS
Sequence Positions	1-30
Sequence Length	265
Applicable Applications for anti-POU5F1 antibody	IF (Immunofluorescence), ELISA, WB (Western Blot)
Cellular Location	Cytoplasm. Nucleus. Note=Expressed in a diffuse and slightly punctuate pattern
Tissue Location	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
Function	Transcription factor that binds to the octamer motif (5'-ATTTGCAT-3'). Forms a trimeric complex with SOX2 on DNA and controls the expression of a number of genes involved in embryonic development such as YES1, FGF4, UTF1 and ZFP206. Critical for early embryogenesis and for embryonic stem cell pluripotency.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



IF (Immunofluorescence)
Immunofluorescence analysis of OCT3(OCT4) antibody (N-term) in HeLa cells. 0.025 mg/ml primary antibody was followed by Alexa-Fluor-546-conjugated donkey anti-rabbit IgG (H+L). Alexa-Fluor-546 emits orange fluorescence. Blue counterstaining is DAPI.



WB (Western Blot)
The anti-OCT4 (OCT3) (N-term) Pab is used in Western blot to detect OCT4 (OCT3) in A375 cell lysate.

ADDITIONAL INFORMATION

Related Product Information for anti-POU5F1 antibody	Transcription factors containing the POU homeodomain have been shown to be important regulators of tissue-specific gene expression in lymphoid and pituitary differentiation and in early mammalian development. Two forms of OCT3 mRNA are expressed in adult tissues as a result of alternative splicing--OCT3A and OCT3B. Reverse transcriptase PCR showed low level of expression in both OCT3A and OCT3B mRNA in all adult human tissues examined. Oct3 is present in mouse oocytes before and after fertilization. When fertilized oocytes were injected with antisense Oct3 oligonucleotides or double-stranded DNA containing the octamer motif, embryonic DNA synthesis was inhibited and the embryos were arrested at the one-cell stage.
Product Categories/Family for anti-POU5F1 antibody	Developmental Biology; Signal Transduction
References	Looijenga, L.H., et al., Cancer Res. 63(9):2244-2250 (2003). Remenyi, A., et al., Genes Dev. 17(16):2048-2059 (2003). Nichols, J., et al., Cell 95(3):379-391 (1998). Crouau-Roy, B., et al., Genomics 21(1):241-243 (1994). Takeda, J., et al., Nucleic Acids Res. 20(17):4613-4620 (1992).

NCBI AND UNIPROT INFORMATION

NCBI GI #	42560248
NCBI GeneID	5460
NCBI Accession #	NP_002692
NCBI GenBank Nucleotide #	NM_002701.5
UniProt Accession #	Q01860; P31359; Q15167; Q15168; Q16422; Q5STF3; Q5STF4; A6NCS1; A6NLL8; D2IYK4
Molecular Weight	38571
NCBI Official Full Name	POU domain, class 5, transcription factor 1 isoform 1
NCBI Official Synonym Full Names	POU class 5 homeobox 1
NCBI Official Symbol	POU5F1
NCBI Official Synonym Symbols	OCT3; OCT4; OTF3; OTF4; OTF-3; Oct-3; Oct-4
NCBI Protein Information	POU domain, class 5, transcription factor 1
UniProt Protein Name	POU domain, class 5, transcription factor 1
UniProt Gene Name	POU5F1

UniProt Synonym Gene Names	OCT3; OCT4; OTF3; Oct-3; Oct-4; OTF-3
UniProt Entry Name	PO5F1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/oct4-oct3-antibody-immunofluorescence-western-blot-elisa/287250>