

## Oct4 Antibody / Octamer-binding protein 4 / POU5F1 (F47905)

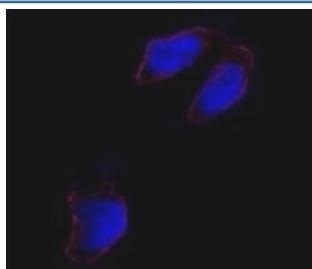
Catalog No.	Formulation	Size
F47905-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F47905-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

**Bulk quote request**

<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit Ig
<b>Purity</b>	Purified
<b>UniProt</b>	Q01860
<b>Applications</b>	Western Blot : 1:1000 Immunofluorescence : 1:50-1:100
<b>Limitations</b>	This Oct4 antibody is available for research use only.

150  
100  
75  
50  
37  
25  
20  
15  
10

Oct4 antibody used in western blot to detect OCT4 in A375 cell lysate. Predicted molecular weight ~38/30kDa (isoform A/B), commonly observed at 38-45 kDa.



Immunofluorescence analysis of Oct4 antibody and HeLa cells. Primary Ab was followed by Alexa-Fluor-546-conjugated donkey rabbit IgG (H+L). Alexa-Fluor-546 emits orange fluorescence. Blue counterstaining is DAPI.

## Description

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 POU5F1/OCT4/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.

## Application Notes

Titration of the Oct4 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

## Immunogen

A portion of amino acids 1-30 from the human protein was used as the immunogen for this Oct4 antibody.

## Storage

Aliquot the Oct4 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.