



# Mouse anti-Human Oct3/4 (Isoform A) monoclonal antibody, clone P60-909 [Alexa Fluor® 647] (CABT-B9247)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Immunogen</b>	Human Oct3/4 Isoform A Recombinant Protein
<b>Isotype</b>	IgG1, κ
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human, Mouse
<b>Clone</b>	P60-909
<b>Purification</b>	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
<b>Conjugate</b>	Alexa Fluor 647
<b>Applications</b>	FC; Bioimaging; IF
<b>Format</b>	Liquid
<b>Size</b>	50 tests
<b>Buffer</b>	Aqueous buffered solution containing BSA, protein stabilizer, and ≤0.09% sodium azide.
<b>Storage</b>	Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

## BACKGROUND

<b>Introduction</b>	Development of a multicellular organism from a single fertilized egg is regulated by the
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coordinated activity of DNA transcription factors. Oct3/4, a member of the POU family of transcription factors, functions in pluripotent cells of early embryonic stem (ES) cell lines and embryonal carcinomas (EC). The human POU5F1 gene can encode various splice variants, two of which are Oct3/4A and Oct3/4B. Both isoforms share identical POU DNA-binding and C-terminal domains but differ in their N-terminal domain. The N-terminal domain of Oct3/4B is inhibitory to the DNA binding domain and therefore cannot stimulate transcription of Oct3/4-dependent genes. Oct3/4B can be detected in both pluripotent and some differentiated cell types in both the nucleus and cytoplasm, but its function is unclear. There is not an equivalent to Oct3/4B in mouse. Oct3/4A is expressed in the nucleus and has been demonstrated to orchestrate the transcription of Oct3/4-dependent genes. It has been demonstrated that the expression of Oct3/4 isoforms can vary greatly in different cell types, and discrimination of these is crucial for assessing Oct3/4 expression and function. The O50-808 monoclonal antibody recognizes human Oct3/4 Isoform A and mouse Oct3/4.

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<b>Keywords</b>	POU5F1; POU class 5 homeobox 1; OCT3; OCT4; OTF3; OTF4; OTF-3; Oct-3; Oct-4; POU domain, class 5, transcription factor 1; octamer-binding protein 3; octamer-binding protein 4; POU domain transcription factor OCT4; octamer-binding transcription factor 3; POU-type homeodomain-containing DNA-binding protein;
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## GENE INFORMATION

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Entrez Gene ID	<a href="#">5460</a>
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UniProt ID	<a href="#">M1S623</a>
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