

## ARG57854 anti-OCT4 antibody

Package: 100 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes OCT4
Tested Reactivity	Hu, Ms
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	OCT4
Species	Human
Immunogen	Synthetic peptide of Human OCT4.
Conjugation	Un-conjugated
Alternate Names	OTF-3; OCT4; OCT3; Octamer-binding protein 4; OTF3; Oct-3; Oct-4; OTF4; POU domain, class 5, transcription factor 1; Octamer-binding transcription factor 3; Octamer-binding protein 3

### Application Instructions

Application table	Application	Dilution
	IHC-P	1:50 - 1:100
	WB	1:500 - 1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Mouse testis	

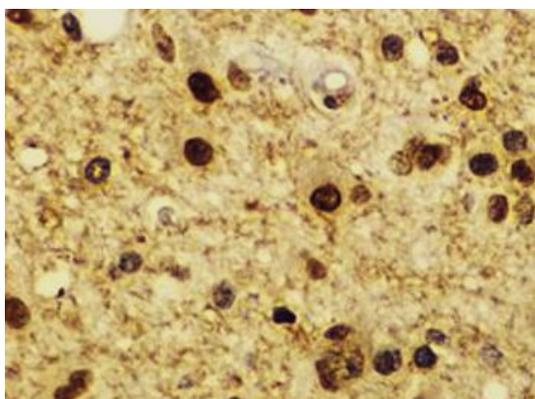
### Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

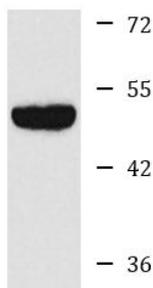
Gene Symbol	POU5F1
Gene Full Name	POU class 5 homeobox 1
Background	This gene encodes a transcription factor containing a POU homeodomain that plays a key role in embryonic development and stem cell pluripotency. Aberrant expression of this gene in adult tissues is associated with tumorigenesis. This gene can participate in a translocation with the Ewing's sarcoma gene on chromosome 21, which also leads to tumor formation. Alternative splicing, as well as usage of alternative AUG and non-AUG translation initiation codons, results in multiple isoforms. One of the AUG start codons is polymorphic in human populations. Related pseudogenes have been identified on chromosomes 1, 3, 8, 10, and 12. [provided by RefSeq, Oct 2013]
Function	Transcription factor that binds to the octamer motif (5'-ATTGTCAT-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. [UniProt]
Calculated Mw	39 kDa
PTM	Sumoylation enhances the protein stability, DNA binding and transactivation activity. Sumoylation is required for enhanced YES1 expression (By similarity).  Ubiquitinated; undergoes 'Lys-63'-linked polyubiquitination by WWP2 leading to proteasomal degradation.  ERK1/2-mediated phosphorylation at Ser-111 promotes nuclear exclusion and proteasomal degradation. Phosphorylation at Thr-235 and Ser-236 decrease DNA-binding and alters ability to activate transcription. [UniProt]
Cellular Localization	Cytoplasm, Nucleus. [UniProt]

## Images



ARG57854 anti-OCT4 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human brain cancer stained with ARG57854 anti-OCT4 antibody at 1:100 dilution.



Mouse testis

ARG57854 anti-OCT4 antibody WB image

Western blot: 25 µg of Mouse testis lysate stained with ARG57854 anti-OCT4 antibody at 1:1000 dilution.