

ARG56142 anti-OCT4 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes OCT4
Tested Reactivity	Ms
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	OCT4
Species	Mouse
Immunogen	KLH-conjugated synthetic peptide corresponding to aa. 86-119 (N-terminus) of Mouse OCT4.
Conjugation	Un-conjugated
Alternate Names	Otf-3; Oct4; Oct3; Oct3/4; Otf-4; Otf3; OTF-3; Oct-3; Oct-4; Octamer-binding transcription factor 3; Otf4; NF-A3; Oct-3/4; POU domain, class 5, transcription factor 1; Otf3-rs7; Octamer-binding protein 4; Octamer-binding protein 3; Otf3g

Application Instructions

Application table	Application	Dilution
	IHC-P	1:25
	WB	1:2000
Application Note	IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0). * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	F9	

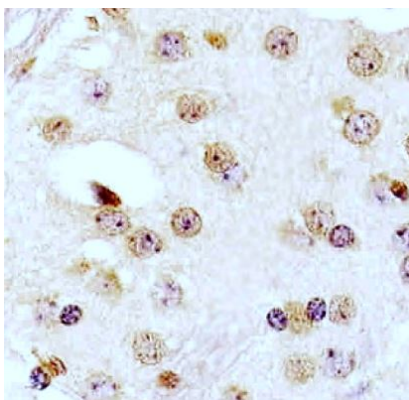
Properties

Form	Liquid
Purification	Purification with Protein A and immunogen peptide.
Buffer	PBS and 0.09% (W/V) Sodium azide.
Preservative	0.09% (W/V) Sodium azide.
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 or below. 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

Database links	GeneID: 18999 Mouse Swiss-port # P20263 Mouse
Gene Symbol	Pou5f1
Gene Full Name	POU domain, class 5, transcription factor 1
Background	The protein encoded by this gene belongs to the POU domain family of transcription factors. POU domain transcription factors bind to a specific octamer DNA motif and regulate cell type-specific differentiation pathways. The encoded protein plays a key role in embryonic development and stem cell pluripotency. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]
Function	Transcription factor that binds to the octamer motif (5'-ATTGCAT-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.
Cellular Localization	Cytoplasm; Nucleus. Note: Expressed in a diffuse and slightly punctuate pattern.

Images



ARG56142 anti-OCT4 antibody IHC-P image

Immunohistochemistry: Paraformaldehyde-fixed and paraffin-embedded Mouse brain stained with ARG56142 anti-OCT4 antibody at 1:25 dilution (1 hour, 37°C). Tissue was blocked with 3% BSA for 0.5 hour at RT. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0).



ARG56142 anti-OCT4 antibody WB image

Western blot: 20 µg of F9 cell lysate stained with ARG56142 anti-OCT4 antibody.