

ARG65657 anti-OCT4 antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes OCT4
Tested Reactivity	Hu, Ms
Predict Reactivity	Rat
Tested Application	WB
Host	Goat
Clonality	Polyclonal
Target Name	OCT4
Species	Mouse
Immunogen	Synthetic peptide around the internal region of Mouse OCT4 (C-DRPNAVKLEKVEP).
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
	WB	1 - 2 µg/ml
Application Note	WB: Recommend incubate at RT for 1h. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

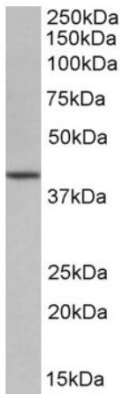
Properties

Form	Liquid
Purification	Affinity purified
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	0.5% BSA
Concentration	0.5 mg/ml
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

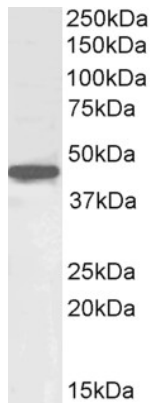
Database links	GeneID: 18999 Mouse GeneID: 5460 Human Swiss-port # P20263 Mouse Swiss-port # Q01860 Human
Gene Symbol	Pou5f1
Gene Full Name	POU domain, class 5, transcription factor 1
Background	The protein encoded by this gene belongs to the POU domain family of transcription factors. POU domain transcription 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]
Research Area	Developmental Biology antibody; Gene Regulation antibody
Calculated Mw	38.2 kDa (NP_038661.2)
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.

Images



ARG65657 anti-OCT4 antibody WB image

Western blot: 35 µg of NIH3T3 lysate stained with ARG65657 anti-OCT4 antibody at 1 µg/ml dilution (1 hour incubation).



ARG65657 anti-OCT4 antibody WB image

Western blot: 35 µg of HepG2 cell lysate (in RIPA buffer) stained with ARG65657 anti-OCT4 antibody at 1 µg/ml dilution and incubated at RT for 1 hour.