ARG54001
anti-OCT4 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody recognizes OCT3/OCT4
Tested Reactivity	Ms
Tested Application	WB
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Target Name	OCT4
Species	Mouse
Immunogen	Purified recombinant mouse POU5F1/OCT4 protein fragments expressed in E.coli.
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	1:1000

Application Note

* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

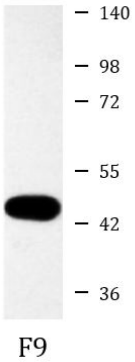
Properties

Form	Liquid
Purification	Affinity purified
Buffer	0.1M Tris-Glycine (pH 7.4), 150 mM NaCl, 0.2% Sodium azide and 50% Glycerol
Preservative	0.2% Sodium azide
Stabilizer	50% Glycerol
Concentration	Lot dependent
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

Database links	GeneID: 18999 Mouse Swiss-port # P20263 Mouse
Gene Symbol	Pou5f1
Gene Full Name	POU domain, class 5, transcription factor 1
Background	Transcription factor that binds to the octamer motif (5'-ATTTGCAT-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.
Function	Transcription factor that binds to the octamer motif (5'-ATTTGCAT-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	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	Nucleus.

Images



ARG54001 anti-OCT4 antibody WB image

Western blot: F9 cell lysate stained with ARG54001 anti-OCT4 antibody at 1:1000 dilution.