10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Oct4 Antibody

Rabbit mAb
Catalog # AP90782

Product Information

Application	WB, IHC, IF, ICC, IP, IHF
Primary Accession	Q01860
Reactivity	Human, Mouse
Clonality	Monoclonal
Other Names	Octamer binding protein 3; Octamer binding protein 4; OCT3; OCT4; OTF3; OTF4; OTF-3; Oct-3; Oct-4; POU5F1;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	38571

Additional Information

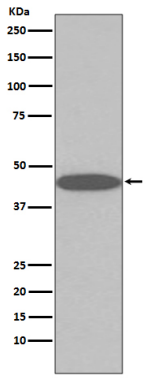
Dilution	WB 1:500~1:1000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50 ChIP
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Oct4
Description	Oct-4 is a transcription factor highly expressed in undifferentiated embryonic stem cells and embryonic germ cells. Forms a trimeric 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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	POU5F1
Synonyms	OCT3, OCT4, OTF3
Function	Transcription factor that binds to the octamer motif (5'- ATTTGCAT-3'). Forms a trimeric complex with SOX2 or SOX15 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.
Cellular Location	Cytoplasm. Nucleus. Note=Expressed in a diffuse and slightly punctuate pattern. Colocalizes with MAPK8 and MAPK9 in the nucleus. {ECO:0000250|UniProtKB:P20263, ECO:0000269|PubMed:18191611, ECO:0000269|PubMed:19274063, ECO:0000269|PubMed:23024368}

Tissue Location	Expressed in developing brain. Highest levels found in specific cell layers of the cortex, the olfactory bulb, the hippocampus and the cerebellum. Low levels of expression in adult tissues.

Images



Western blot analysis of Oct4 expression in NCCIT cell lysate.

Image not found : 202311/AP90782-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human seminoma, using Oct4 Antibody.

Image not found : 202311/AP90782-IF.jpg

Immunofluorescent analysis of NCCIT cells, using Oct4 Antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.