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POU5F1/OCT4 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52657

Product Information

Application	WB
Primary Accession	Q01860
Reactivity	Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Calculated MW	38571

Additional Information

Gene ID	5460
Other Names	MGC22487;Oct 3;Oct 4;Oct-3;Oct-4;OCT3;Oct4;Octamer binding protein 3;Octamer binding protein 4;Octamer binding transcription factor 3;Octamer-binding protein 3;Octamer-binding protein 4;Octamer-binding transcription factor 3;OTF 3;OTF 4;OTF-3;OTF3;OTF4; PO5F1_HUMAN;POU class 5 homeobox 1;POU domain class 5 transcription factor 1;POU domain transcription factor OCT4;POU domain, class 5, transcription factor 1;POU5F1.
Dilution	WB~~1:1000
Format	Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.09% (W/V) sodium azide, 50% glycerol.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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.

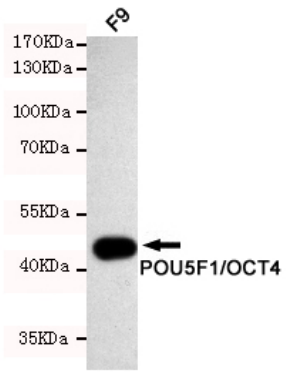
Background

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.

References

Takeda J.,et al.Nucleic Acids Res. 20:4613-4620(1992).
Stuart P.E.,et al.Tissue Antigens 76:387-397(2010).
Shiina T.,et al.Genetics 173:1555-1570(2006).
Shiina S.,et al.Submitted (SEP-1999) to the EMBL/GenBank/DDBJ databases.
Mungall A.J.,et al.Nature 425:805-811(2003).

Images



Western blot detection of POU5F1/OCT4 in F9 cell lysates using POU5F1/OCT4 mouse mAb (1:1000 diluted).Predicted band size: 45KDa.Observed band size: 45KDa.