

POU5F1/OCT4 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52657

Specification

POU5F1/OCT4 Antibody - Product Information

Application	WB
Primary Accession	Q01860
Reactivity	Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Calculated MW	45 KDa

POU5F1/OCT4 Antibody - 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

POU5F1/OCT4 Antibody - 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

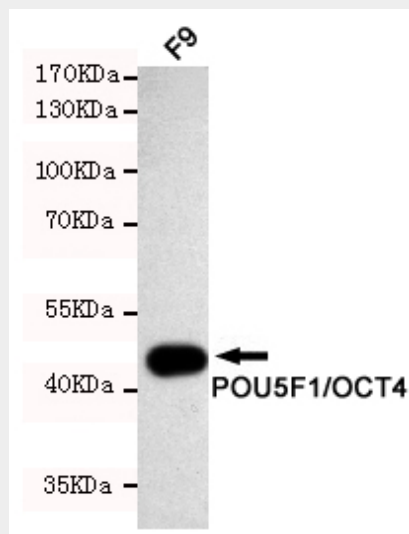
Expressed in developing brain. Highest levels found in specific cell layers of the cortex, the olfactory bulb, the hippocampus and the cerebellum. Low levels of expression in adult tissues.

POU5F1/OCT4 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

POU5F1/OCT4 Antibody - 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.

POU5F1/OCT4 Antibody - 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.

POU5F1/OCT4 Antibody - 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).