

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

**Specification**

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**POU5F1/OCT4 Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">Q01860</a>
Reactivity	<b>Mouse</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG2b</b>
Calculated MW	<b>45 KDa</b>

**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

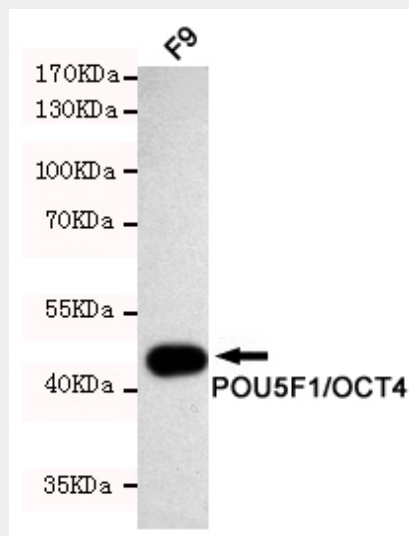
Expressed in developing brain. Highest levels found in specific cell layers of the cortex, the olfactory bulb, the hippocampus and the cerebellum. Low levels of expression in adult tissues.

#### 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).