

**POU5F1 Antibody (Ascites)**  
**Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM1967a**

**Specification**

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**POU5F1 Antibody (Ascites) - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q01860</a>
Other Accession	<a href="#">NP_002692.2</a>
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgM
Calculated MW	38571

**POU5F1 Antibody (Ascites) - Additional Information**

**Gene ID** 5460

**Other Names**

POU domain, class 5, transcription factor 1, Octamer-binding protein 3, Oct-3, Octamer-binding protein 4, Oct-4, Octamer-binding transcription factor 3, OTF-3, POU5F1, OCT3, OCT4, OTF3

**Target/Specificity**

This POU5F1 monoclonal antibody is generated from mouse immunized with POU5F1 recombinant protein.

**Dilution**

WB~~1:500~4000

**Format**

Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

POU5F1 Antibody (Ascites) is for research use only and not for use in diagnostic or therapeutic procedures.

**POU5F1 Antibody (Ascites) - 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

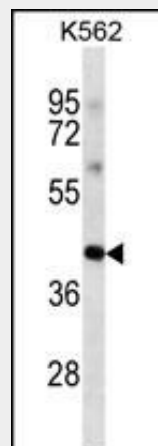
Expressed in developing brain. Highest levels found in specific cell layers of the cortex, the olfactory bulb, the hippocampus and the cerebellum. Low levels of expression in adult tissues.

### POU5F1 Antibody (Ascites) - Protocols

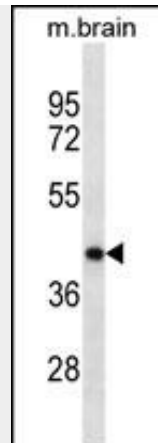
Provided below are standard protocols that you may find useful for product applications.

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

### POU5F1 Antibody (Ascites) - Images



POU5F1 Antibody (Cat. #AM1967a) western blot analysis in K562 cell line lysates (35µg/lane). This demonstrates the POU5F1 antibody detected the POU5F1 protein (arrow).



POU5F1 Antibody (Cat. #AM1967a) western blot analysis in mouse brain tissue lysates (35µg/lane). This demonstrates the POU5F1 antibody detected the POU5F1 protein (arrow).

#### **POU5F1 Antibody (Ascites) - Background**

This gene encodes a transcription factor containing a POU homeodomain. This transcription factor plays a role in embryonic development, especially during early embryogenesis, and it is necessary for embryonic stem cell pluripotency. A translocation of this gene with the Ewing's sarcoma gene, t(6;22)(p21;q12), has been linked to tumor formation. Alternative splicing, as well as usage of alternative translation initiation codons, results in multiple isoforms, one of which initiates at a non-AUG (CUG) start codon. Related pseudogenes have been identified on chromosomes 1, 3, 8, 10, and 12.

#### **POU5F1 Antibody (Ascites) - References**

Abu-Remaileh, M., et al. EMBO J. 29(19):3236-3248(2010)  
Ucisik-Akkaya, E., et al. Mol. Hum. Reprod. 16(10):770-777(2010)  
Schultz, S.S., et al. Mol. Cell. Biol. 30(18):4521-4534(2010)  
Kim, S., et al. Br. J. Cancer 102(2):436-446(2010)  
Wang, X., et al. Stem Cells 27(6):1265-1275(2009)