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POU5F1 / OCT4 Antibody
Rabbit Polyclonal Antibody
Catalog # ALS13232

Specification

POU5F1 / OCT4 Antibody - Product Information

Application	**IF, IHC**
Primary Accession	Q01860
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**39kDa KDa**

POU5F1 / OCT4 Antibody - 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
Human OCT3/4. Predicted cross-reactivity based on amino acid sequence homology: rabbit (85%), bovine (85%), pig (88%), monkey (97%).

Reconstitution & Storage
Aliquot and store at -20°C. Minimize freezing and thawing.

Precautions
POU5F1 / OCT4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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.

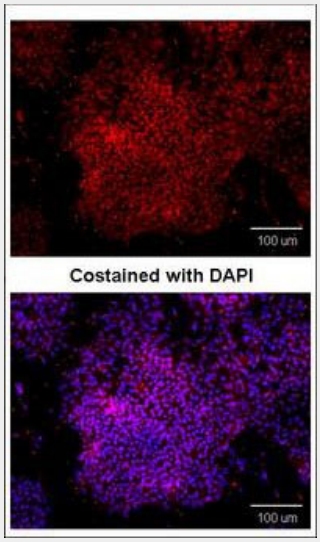
Volume
50 µl

POU5F1 / OCT4 Antibody - Protocols

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

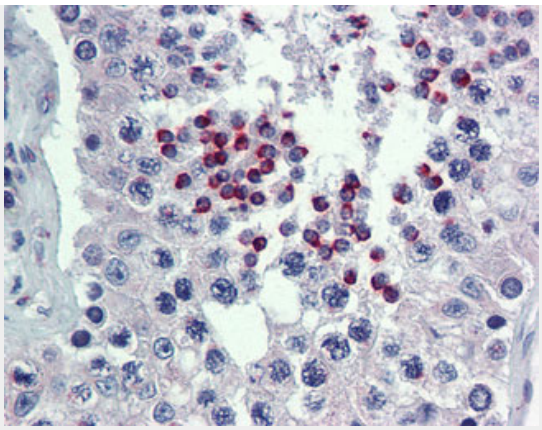
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

POU5F1 / OCT4 Antibody - Images



Immunofluorescence of paraformaldehyde-fixed human embryonic stem cell, using OCT3/4 antibody at...

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Anti-POU5F1 / OCT4 antibody IHC of human testis.

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).