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(Mouse) Pou5f1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21334a

Product Information

Application	WB, IHC-P, E
Primary Accession	P20263
Reactivity	Mouse
Predicted	Rat
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB52378
Calculated MW	38216

Additional Information

Gene ID	18999
Other Names	POU domain, class 5, transcription factor 1, NF-A3, Octamer-binding protein 3, Oct-3, Octamer-binding protein 4, Oct-4, Octamer-binding transcription factor 3, OTF-3, Pou5f1, Oct-3, Oct-4, Otf-3, Otf3
Target/Specificity	This Mouse Pou5f1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 86-119 amino acids from the N-terminal region of Mouse Pou5f1.
Dilution	WB~~1:2000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	(Mouse) Pou5f1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Pou5f1
Synonyms	Oct-3, Oct-4, Otf-3, Otf3
Function	Transcription factor that binds to the octamer motif (5'- ATTTGCAT-3')

	(PubMed:1690859, PubMed:17525163, PubMed:1967980, PubMed:1972777, PubMed:23376973). 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 (PubMed:15863505, PubMed:17097055, PubMed:17496161, PubMed:19740739). Critical for early embryogenesis and for embryonic stem cell pluripotency (PubMed:1690859, PubMed:17496161, PubMed:18662995, PubMed:18687992, PubMed:1972777, PubMed:19740739, PubMed:23376973, PubMed:29153991, PubMed:32703285).
Cellular Location	Cytoplasm {ECO:0000250|UniProtKB:Q01860}. Nucleus {ECO:0000255|PROSITE-ProRule:PRU00108, ECO:0000255|PROSITE-ProRule:PRU00530, ECO:0000269|PubMed:17496161, ECO:0000269|PubMed:17525163, ECO:0000269|PubMed:29153991} Note=Expressed in a diffuse and slightly punctuate pattern (By similarity). Colocalizes with MAPK8 and MAPK9 in the nucleus (PubMed:29153991). {ECO:0000250|UniProtKB:Q01860, ECO:0000269|PubMed:29153991}
Tissue Location	Expressed the totipotent and pluripotent stem cells of the pregastrulation embryo. Also expressed in primordial germ cells and in the female germ line. Absent from adult tissues

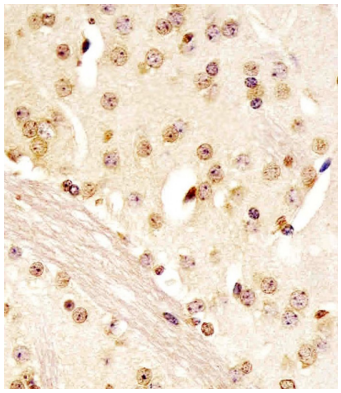
Background

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

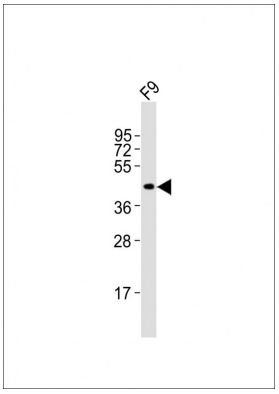
Rosner M.H.,et al.Nature 345:686-692(1990).
Schoeler H.R.,et al.Nature 344:435-439(1990).
Okamoto K.,et al.Cell 60:461-472(1990).
Okazawa H.,et al.EMBO J. 10:2997-3005(1991).
Tsuruzoe S.,et al.Biochem. Biophys. Res. Commun. 351:920-926(2006).

Images



AP21334a staining (Mouse) Pou5f1 in mouse brain sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

Anti-Pou5f1 Antibody (N-term)at 1:2000 dilution + F9 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 38



kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.