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POU4F1 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50748

Specification

POU4F1 Antibody - Product Information

Application	**WB**
Primary Accession	Q01851
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**43 KDa**
Antigen Region	**321-349**

POU4F1 Antibody - Additional Information

Gene ID 5457

Other Names
POU domain, class 4, transcription factor 1, Brain-specific homeobox/POU domain protein 3A, Brain-3A, Brn-3A, Homeobox/POU domain protein RDC-1, Oct-T1, POU4F1, BRN3A, RDC1

Dilution
WB~~1:1000

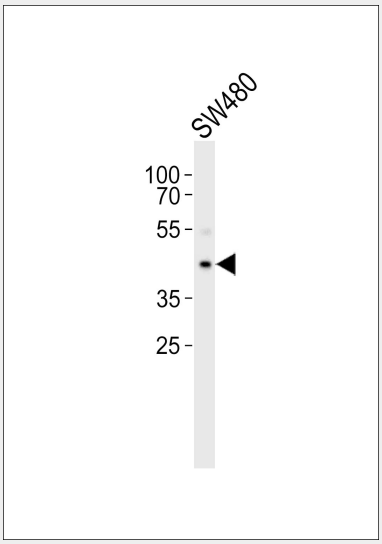
Format
Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions
-20℃

POU4F1 Antibody - Protein Information

Name POU4F1 (HGNC:9218)

Function
Multifunctional transcription factor with different regions mediating its different effects. Acts by binding (via its C-terminal domain) to sequences related to the consensus octamer motif 5'- ATGCAAAT-3' in the regulatory regions of its target genes.



Western blot analysis of lysate from SW480 cell line,using POU4F1 Antibody(AP50748). AP50748 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysate at 35ug.

POU4F1 Antibody - Background

Probable transcription factor which may play a role in the regulation of specific gene expression within a subset of neuronal lineages. May play a role in determining or maintaining the identities of a small subset of visual system neurons.

POU4F1 Antibody - References

Bhargava A.K.,et al.Proc. Natl. Acad. Sci. U.S.A. 90:10260-10264(1993).
Xiang M.,et al.J. Neurosci. 15:4762-4785(1995).
Dunham A.,et al.Nature 428:522-528(2004).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Collum R.G.,et al.Nucleic Acids Res. 20:4919-4925(1992).

Regulates the expression of specific genes involved in differentiation and survival within a subset of neuronal lineages. It has been shown that activation of some of these genes requires its N-terminal domain, maybe through a neuronal-specific cofactor. Ativates BCL2 expression and protects neuronal cells from apoptosis (via the N-terminal domain). Induces neuronal process outgrowth and the coordinate expression of genes encoding synaptic proteins. Exerts its major developmental effects in somatosensory neurons and in brainstem nuclei involved in motor control. Stimulates the binding affinity of the nuclear estrogene receptor ESR1 to DNA estrogen response element (ERE), and hence modulates ESR1-induced transcriptional activity. May positively regulate POU4F2 and POU4F3. Regulates dorsal root ganglion sensory neuron specification and axonal projection into the spinal cord. Plays a role in TNFSF11-mediated terminal osteoclast differentiation. Negatively regulates its own expression interacting directly with a highly conserved autoregulatory domain surrounding the transcription initiation site.

Cellular Location
Nucleus. Cytoplasm {ECO:0000250|UniProtKB:P17208}

Tissue Location
Expressed in the brain and the retina. Present in the developing brain, spinal cord and eye.

POU4F1 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