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Goat anti-POU4F2 Antibody

Peptide-affinity purified goat antibody
Catalog # AF4514a

Product Information

Application	FC, Pep-ELISA
Primary Accession	Q12837
Other Accession	NP_004566.2
Reactivity	Human, Mouse, Rat, Dog, Bovine
Host	Goat
Clonality	Polyclonal
Clone Names	POU4F2
Calculated MW	43087

Additional Information

Gene ID	5458
Other Names	POU4F2; POU class 4 homeobox 2; BRN3.2; BRN3B; Brn-3b; Brn3b POU domain transcription factor; POU domain class 4 transcription factor 2; POU domain protein; POU domain, class 4, transcription factor 2
Dilution	FC~~1:10~50 Pep-ELISA~~N/A
Format	Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.
Immunogen	This antibody is not expected to cross-react to the similar POU4F3 (GeneID 5459)
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Goat anti-POU4F2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	POU4F2 (HGNC:9219)
Synonyms	BRN3B
Function	Tissue-specific DNA-binding transcription factor involved in the development and differentiation of target cells (PubMed:19266028, PubMed:23805044). Functions either as activator or repressor modulating the rate of target gene

	transcription through RNA polymerase II enzyme in a promoter-dependent manner (PubMed:19266028, PubMed:23805044). Binds to the consensus octamer motif 5'-AT[A/T]A[T/A]T[A/T]A-3' of promoter of target genes. Plays a fundamental role in the gene regulatory network essential for retinal ganglion cell (RGC) differentiation. Binds to an octamer site to form a ternary complex with ISL1; cooperates positively with ISL1 and ISL2 to potentiate transcriptional activation of RGC target genes being involved in RGC fate commitment in the developing retina and RGC axon formation and pathfinding. Inhibits DLX1 and DLX2 transcriptional activities preventing DLX1- and DLX2-mediated ability to promote amacrine cell fate specification. In cooperation with TP53 potentiates transcriptional activation of BAX promoter activity increasing neuronal cell apoptosis. Negatively regulates BAX promoter activity in the absence of TP53. Acts as a transcriptional coactivator via its interaction with the transcription factor ESR1 by enhancing its effect on estrogen response element (ERE)-containing promoter. Antagonizes the transcriptional stimulatory activity of POU4F1 by preventing its binding to an octamer motif. Involved in TNFSF11-mediated terminal osteoclast differentiation (By similarity).
Cellular Location	Nucleus. Nucleus speckle. Cytoplasm {ECO:0000250|UniProtKB:Q63934}
Tissue Location	Expressed in the brain (PubMed:7691107). Expressed in the ganglion cell layer of the retina (PubMed:7691107)