

Goat anti-POU4F2 Antibody
Peptide-affinity purified goat antibody
Catalog # AF4514a

Specification

Goat anti-POU4F2 Antibody - Product Information

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

Goat anti-POU4F2 Antibody - 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

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.

Goat anti-POU4F2 Antibody - 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:

target="_blank">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)

Goat anti-POU4F2 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 Cytometry](#)
- [Cell Culture](#)

Goat anti-POU4F2 Antibody - Images