

POU4F2 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP14993b**Specification**

POU4F2 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q12837](#)**POU4F2 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 5458**Other Names**

POU domain, class 4, transcription factor 2, Brain-specific homeobox/POU domain protein 3B, Brain-3B, Brn-3B, POU4F2, BRN3B

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

POU4F2 Antibody (C-term) Blocking Peptide - 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)

POU4F2 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

POU4F2 Antibody (C-term) Blocking Peptide - Images**POU4F2 Antibody (C-term) Blocking Peptide - Background**

POU4F2 is a member of the POU-domain family of transcription factors. POU-domain proteins have been observed to play important roles in control of cell identity in several systems. A class IV POU-domain protein, POU4F2 is found in human retina exclusively within a subpopulation of ganglion cells where it may play a role in determining or maintaining the identities of a small subset of visual system neurons.

POU4F2 Antibody (C-term) Blocking Peptide - References

Qiu, F., et al. J. Neurosci. 28(13):3392-3403(2008) Budhram-Mahadeo, V.S., et al. Oncogene 27(1):145-154(2008) Calissano, M., et al. FEBS Lett. 581(13):2490-2496(2007) Choy, K.W., et al. Physiol. Genomics 25(1):9-15(2006) Samady, L., et al. Int. J. Cancer 118(4):869-878(2006)