

Datasheet for ABIN7540564
anti-POU4F2 antibody (N-Term)



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1 Publication

Overview

Quantity:	25 µL
Target:	POU4F2
Binding Specificity:	N-Term
Reactivity:	Mouse
Host:	Goat
Clonality:	Polyclonal
Conjugate:	This POU4F2 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Fluorescence Microscopy (FM), Immunofluorescence (IF), Immunohistochemistry (IHC)

Product Details

Purpose:	Brn3b Antibody
Immunogen:	Anti-Brn3b antibody was prepared from whole goat serum produced by repeated immunizations with a synthetic peptide corresponding to a near N-terminal portion of mouse Pou4f2 conjugated to Keyhole Limpet Hemocyanin (KLH).
Isotype:	IgG
Cross-Reactivity (Details):	This affinity purified antibody is directed against mouse Brn3b.
Purification:	The product was affinity purified from monospecific antiserum by immunoaffinity purification.
Sterility:	Sterile filtered

Target Details

Target:	POU4F2
Alternative Name:	Pou4f2 (POU4F2 Products)
Background:	Goat Anti-Brn3b Antibody, Goat Anti-Pou4f2 Antibody, POU domain, class 4, transcription factor 2, Brain-specific homeobox/POU domain protein 3B, Brn-3B, Brain-3B, Brn-3.2, Brn3b (Brain-Specific Homeobox/POU Domain Protein 3B) or POU4F2 (POU Class 4 Homeobox 2) is a DNA-binding transcriptional regulator and coregulator that recognizes and binds to the consensus octamer binding site 5-AT[A/T]A[T/A]T[A/T]A-3 in promoter of target genes. Brn3b plays a fundamental role in the gene regulatory network essential for retinal ganglion cell (RGC) differentiation. It cooperates with the transcription factor ISL1 to achieve RGC fate specification in the developing retina. And plays a role in RGC axon formation and guidance by regulating gene expression of specific target genes. Brn3b plays a role in TNFSF11-mediated terminal osteoclast differentiation. It binds chromatin at promoter region of target genes. It acts either as a transcriptional activator or repressor. It plays a role in the regulation of breast cancer cell growth by promoting transcription activation as well as repression of specific target genes. It is involved in tumor breast progression and invasion. Brn3b also plays a role either as a transcriptional coactivator or corepressor. Anti-Brn3b Antibody is useful for researchers interested in breast cancer research, transcription factor activity, and DNA binding.
Gene ID:	18997
UniProt:	Q63934
Pathways:	Intracellular Steroid Hormone Receptor Signaling Pathway , Sensory Perception of Sound

Application Details

Application Notes:	ELISA_Dilution: 1:10,000 - 50,000 Immunohistochemistry_Dilution: 1:100 IF_Microscopy_Dilution: 5 µg/mL Western_Blot_Dilution: 1:1000
Comment:	Anti-Brn3b Antibody has been tested in WB, IHC, and IF. Expect a band at ~43kDa in western blot using appropriate lysates. Positive controls used: Rat pup PND2-6 - minimal cortex brain lysate in WB, Mouse testis in IHC, Post-natal rat pup (PND1) heterogeneous brain cells in IF.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: None Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Expiry Date:	12 months

Publications

Product cited in: Mehta, Daghsni, Raeisossadati, Xu, Davis, Naidich, Wang, Tao, Pi, Chen, Kostka, Liu, Gross, Kuwajima, Aldiri: "A cis-regulatory module underlies retinal ganglion cell genesis and axonogenesis." in: **Cell reports**, Vol. 43, Issue 6, pp. 114291, (2024) ([PubMed](#)).