

POU3F2 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16803C

Specification

POU3F2 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	P20265
Other Accession	P56222 , P31360 , NP_005595.2
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	199-226

POU3F2 Antibody (Center) - Additional Information

Gene ID 5454

Other Names

POU domain, class 3, transcription factor 2, Brain-specific homeobox/POU domain protein 2, Brain-2, Brn-2, Nervous system-specific octamer-binding transcription factor N-Oct-3, Octamer-binding protein 7, Oct-7, Octamer-binding transcription factor 7, OTF-7, POU3F2, BRN2, OCT7, OTF7

Target/Specificity

This POU3F2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 199-226 amino acids from the Central region of human POU3F2.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

POU3F2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

POU3F2 Antibody (Center) - Protein Information

Name POU3F2

Synonyms BRN2, OCT7, OTF7

Function Transcription factor that plays a key role in neuronal differentiation (By similarity). Binds preferentially to the recognition sequence which consists of two distinct half-sites, ('GCAT') and ('TAAT'), separated by a non-conserved spacer region of 0, 2, or 3 nucleotides (By similarity). Acts as a transcriptional activator when binding cooperatively with SOX4, SOX11, or SOX12 to gene promoters (By similarity). The combination of three transcription factors, ASCL1, POU3F2/BRN2 and MYT1L, is sufficient to reprogram fibroblasts and other somatic cells into induced neuronal (iN) cells in vitro (By similarity). Acts downstream of ASCL1, accessing chromatin that has been opened by ASCL1, and promotes transcription of neuronal genes (By similarity).

Cellular Location

Nucleus.

Tissue Location

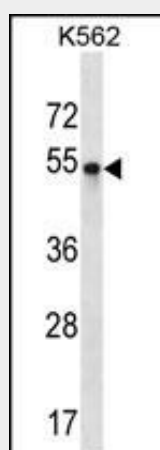
Expressed specifically in the neuroectodermal cell lineage

POU3F2 Antibody (Center) - 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](#)

POU3F2 Antibody (Center) - Images



POU3F2 Antibody (Center) (Cat. #AP16803c) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the POU3F2 antibody detected the POU3F2 protein (arrow).

POU3F2 Antibody (Center) - Background

POU3F2 belongs to a large family of transcription factors

that bind to the octameric DNA sequence ATGCAAAT. Most of these proteins share a highly homologous region, referred to as the POU domain, that occurs in several mammalian transcription factors, including the octamer-binding proteins Oct1 (POU2F1; MIM 164175) and Oct2 (POU2F2; MIM 164176) and the pituitary protein Pit1 (PIT1; MIM 173110). Class III POU genes are expressed predominantly in the central nervous system (CNS). It is likely that CNS-specific transcription factors such as these play an important role in mammalian neurogenesis by regulating their diverse patterns of gene [removed]Schreiber et al., 1993 [PubMed 8441633]; Atanasoski et al., 1995 [PubMed 7601453]).

POU3F2 Antibody (Center) - References

Kobi, D., et al. Pigment Cell Melanoma Res 23(3):404-418(2010)
Flammiger, A., et al. J. Invest. Dermatol. 129(4):945-953(2009)
Cabos-Siguier, B., et al. Protein Expr. Purif. 64(1):39-46(2009)
Lowe, J.K., et al. PLoS Genet. 5 (2), E1000365 (2009) :
Potkin, S.G., et al. Schizophr Bull 35(1):96-108(2009)