

#### BRN2 / POU3F2 Antibody (C-Terminus) Rabbit Polyclonal Antibody

Catalog # ALS15673

## Specification

# BRN2 / POU3F2 Antibody (C-Terminus) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW IHC, IF, WB <u>P20265</u> Human Rabbit Polyclonal 47kDa KDa

## BRN2 / POU3F2 Antibody (C-Terminus) - 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

Human POU3F2. At least two isoforms are known to exist. This antibody will recognize both isoforms. POU3F2 antibody is predicted to not cross-react with other members of the POU domain class 3 family.

## **Reconstitution & Storage**

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

### Precautions

BRN2 / POU3F2 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

## BRN2 / POU3F2 Antibody (C-Terminus) - 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.

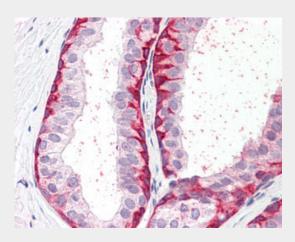
**Tissue Location** Expressed specifically in the neuroectodermal cell lineage

### BRN2 / POU3F2 Antibody (C-Terminus) - Protocols

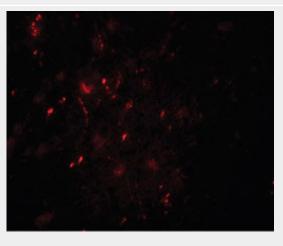
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## BRN2 / POU3F2 Antibody (C-Terminus) - Images

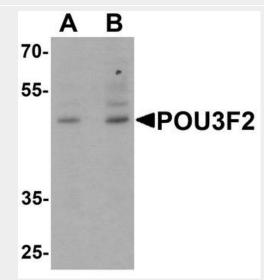


Anti-BRN2 / POU3F2 antibody IHC staining of human prostate.





Immunofluorescence of POU3F2 in human brain tissue with POU3F2 antibody at 20 ug/ml.



Western blot analysis of POU3F2 in 3T3 cell lysate with POU3F2 antibody at (A) 1 and (B) 2 ug/ml.

## BRN2 / POU3F2 Antibody (C-Terminus) - Background

Transcription factor that binds preferentially to the recognition sequence which consists of two distinct half-sites, ('GCAT') and ('TAAT'), separated by a nonconserved spacer region of 0, 2, or 3 nucleotides. Positively regulates the genes under the control of corticotropin-releasing hormone (CRH) and CRH II promoters (By similarity).

### BRN2 / POU3F2 Antibody (C-Terminus) - References

Schreiber E., et al. Nucleic Acids Res. 21:253-258(1993). Angus J., et al. Oncogene 11:691-700(1995). Mungall A.J., et al. Nature 425:805-811(2003). He X., et al. Nature 340:35-42(1989). Waragai M., et al. Hum. Mol. Genet. 8:977-987(1999).