

#8773 Store at -20C

Brn2/POU3F2 Antibody

Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IP	Reactivity: H R	Sensitivity: Endogenous	MW (kDa): 55	Source/Isotype: Rabbit	UniProt ID: #P20265	Entrez-Gene Id: 5454
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Product Usage Information**Application**

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:100

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Brn2/POU3F2 Antibody recognizes endogenous levels of total Brn2/POU3F2 protein.

Species predicted to react based on 100% sequence homology

Mouse

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala208 of human Brn2/POU3F2 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Brn2/POU3F2 is a POU domain-containing transcription factor involved in neuronal differentiation and activation of the corticotrophin-releasing hormone gene (1,2). In mice, disruption of the Brn2 gene results in loss of specific neuronal lineages in the hypothalamus (3). In addition to its role in mammalian neurogenesis, Brn2 has also been implicated in melanoma tumorigenesis and has been shown in the literature to be overexpressed in human melanoma cells compared to normal melanocytes (4,5). Recent studies also identify Brn2 as a transcription factor playing an important role in keratinocyte differentiation (6). Recent reports demonstrate that overexpression of three transcription factors (Brn2, Ascl1, and Myt1L) can directly convert human fibroblasts into functional neurons under precisely defined conditions (7,8).

Background References

1. Fujii, H. and Hamada, H. (1993) *Neuron* 11, 1197-206.
2. Schonemann, M.D. et al. (1995) *Genes Dev* 9, 3122-35.
3. Nakai, S. et al. (1995) *Genes Dev* 9, 3109-21.
4. Cook, A.L. et al. (2003) *J Invest Dermatol* 121, 1150-9.
5. Cook, A.L. and Sturm, R.A. (2008) *Pigment Cell Melanoma Res* 21, 611-26.
6. Shi, G. et al. (2010) *PLoS One* 5, e13216.
7. Pfisterer, U. et al. (2011) *Proc Natl Acad Sci USA* 108, 10343-8.
8. Ambasadhan, R. et al. (2011) *Cell Stem Cell* 9, 113-8.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human **R:** Rat

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