

POU3F2 Antibody

Purified Mouse Monoclonal Antibody Catalog # A01751a

Specification

POU3F2 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW Description E, WB <u>P20265</u> Human Mouse Monoclonal IgG1 46.9kDa KDa

This gene encodes a member of the POU-III class of neural transcription factors. The encoded protein is involved in neuronal differentiation and enhances the activation of corticotropin-releasing hormone regulated genes. Overexpression of this protein is associated with an increase in the proliferation of melanoma cells.

Immunogen Purified recombinant fragment of human POU3F2 (AA: 214-362) expressed in E. Coli.

Formulation Purified antibody in PBS with 0.05% sodium azide

POU3F2 Antibody - 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

Dilution E~~1/10000 WB~~1/250

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions POU3F2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

POU3F2 Antibody - 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).

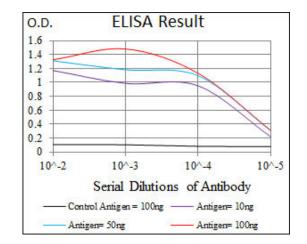
Cellular Location Nucleus.

Tissue Location Expressed specifically in the neuroectodermal cell lineage

POU3F2 Antibody - Protocols

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

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



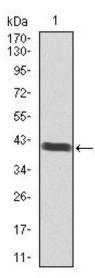


Figure 1: Western blot analysis using POU3F2 mAb against human POU3F2 recombinant protein. (Expected MW is 42.1 kDa)

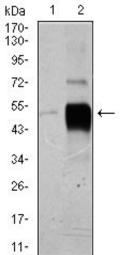


Figure 2: Western blot analysis using POU3F2 mouse mAb against HeLa (1), and SK-N-SH (2) cell lysate.

POU3F2 Antibody - References

1.Cancer Res. 2008 Oct 1;68(19):7788-94.2.Mol Cancer. 2006 Dec 12;5:72.