

POU3F3 Rabbit pAb

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Product Information

Application WB, IHC-P, IHC-F, IF, E

Primary Accession P20264

Predicted Human, Mouse, Rat, Chicken, Dog, Pig, Horse, Rabbit, Sheep

Host Rabbit Clonality Polyclonal **Calculated MW** 50327 **Physical State** Liquid

KLH conjugated synthetic peptide derived from human Brain1/POU3F3 **Immunogen**

351-450/500 **Epitope Specificity**

Isotype IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Nucleus.

SIMILARITY

Belongs to the POU transcription factor family. Class-3 subfamily. Contains 1

homeobox DNA-binding domain. Contains 1 POU-specific domain.

This product as supplied is intended for research use only, not for use in **Important Note**

human, therapeutic or diagnostic applications.

The Brn family of transcription factors are found in a highly restricted subset **Background Descriptions**

of neurons and are critical to the early embryonic development of the central

nervous system. Brn-1 and Brn-2 are class III POU domain proteins.

Expressed during the development of the forebrain and coexpressed in most layer II-V cortical neurons, Brn-1 and Brn-2 appear to critically control the initiation of radial migration of cortical neurons. Brn-2 is thought to be involved in smooth muscle cell development and differentiation. Brn-3 is a class IV POU domain protein. Three Brn-3 proteins have been described and

are designated Brn-3a, Brn-3b and Brn-3c. Brn-3a has two functional transactivating domains, one at the amino terminus and one at the carboxy terminus. While Brn-3a and Brn-3c stimulate transcription, Brn-3b generally functions as a transcriptional repressor. However, Brn-3b, but not Brn-3a, has

been shown to regulate the expression of the acetylcholine receptor.

Additional Information

Gene ID 5455

Other Names POU domain, class 3, transcription factor 3, Brain-specific homeobox/POU

domain protein 1, Brain-1, Brn-1, Octamer-binding protein 8, Oct-8,

Octamer-binding transcription factor 8, OTF-8, POU3F3 (HGNC:9216), BRN1,

OTF8

Target/Specificity Brain. **Dilution** WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-

500, ELISA = 1:5000-10000

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name POU3F3 (HGNC:9216)

Synonyms BRN1, OTF8

Function Transcription factor that acts synergistically with SOX11 and SOX4. Plays a

role in neuronal development (PubMed:<u>31303265</u>). Is implicated in an enhancer activity at the embryonic met-mesencephalic junction; the enhancer

element contains the octamer motif (5'-ATTTGCAT- 3') (By similarity).

Cellular Location Nucleus.

Tissue Location Brain..

Background

The Brn family of transcription factors are found in a highly restricted subset of neurons and are critical to the early embryonic development of the central nervous system. Brn-1 and Brn-2 are class III POU domain proteins. Expressed during the development of the forebrain and coexpressed in most layer II-V cortical neurons, Brn-1 and Brn-2 appear to critically control the initiation of radial migration of cortical neurons. Brn-2 is thought to be involved in smooth muscle cell development and differentiation. Brn-3 is a class IV POU domain protein. Three Brn-3 proteins have been described and are designated Brn-3a, Brn-3b and Brn-3c. Brn-3a has two functional transactivating domains, one at the amino terminus and one at the carboxy terminus. While Brn-3a and Brn-3c stimulate transcription, Brn-3b generally functions as a transcriptional repressor. However, Brn-3b, but not Brn-3a, has been shown to regulate the expression of the acetylcholine receptor.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.