

For Research Use Only

# BRN3A Polyclonal antibody

Catalog Number:32257-1-AP



## Basic Information

<b>Catalog Number:</b> 32257-1-AP	<b>GenBank Accession Number:</b> NM_006237	<b>Purification Method:</b> Antigen affinity Purification
<b>Source:</b> Rabbit	<b>GeneID (NCBI):</b> 5457	<b>Recommended Dilutions:</b> WB: 1:500-1:2000
<b>Isotype:</b> IgG	<b>UNIPROT ID:</b> Q01851	IHC: 1:50-1:500 IF-P: 1:50-1:500
<b>Immunogen Catalog Number:</b> AG35800	<b>Full Name:</b> POU class 4 homeobox 1	
	<b>Calculated MW:</b> 43 kDa	
	<b>Observed MW:</b> 35 kDa	

## Applications

### Tested Applications:

WB, IHC, IF-P, ELISA

### Species Specificity:

human, mouse, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

WB : fetal human brain tissue, mouse brain tissue, mouse cerebellum tissue, rat brain tissue

IHC : mouse eye tissue,

IF-P : rat eye tissue,

## Background Information

BRN3A (Brain-specific Homeobox/POU domain protein 3A, also known as POU4F1) is a member of the class IV POU-domain transcription factor family. It plays a core regulatory role primarily in the development and survival of the nervous system and sensory neurons. By recognizing specific DNA sequences, it activates downstream target genes and is essential for the generation, differentiation, and maintenance of sensory ganglion neurons, including those of the trigeminal, vestibular, and auditory systems. Additionally, it is also involved in regulating cell proliferation and apoptosis in tumors such as breast cancer. It has 2 isoforms with the molecular mass of 33 kDa and 43 kDa.

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

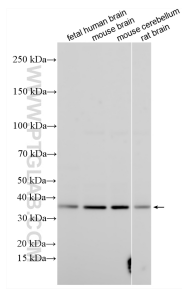
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

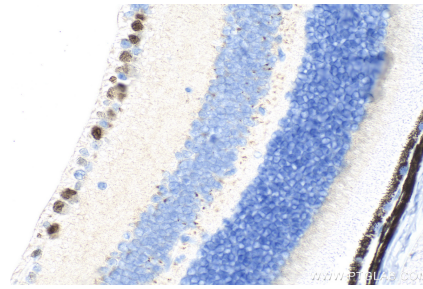
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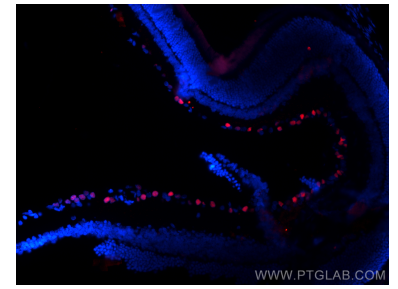
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 32257-1-AP (BRN3A antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse eye tissue slide using 32257-1-AP (BRN3A antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded rat eye tissue using BRN3A antibody (32257-1-AP) at dilution of 1:200 and CoraLite® 594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).