

For Research Use Only

# GBX2 Monoclonal antibody, PBS Only

Catalog Number: 61029-1-PBS



## Basic Information

<b>Catalog Number:</b> 61029-1-PBS	<b>GenBank Accession Number:</b> BC137448	<b>Purification Method:</b> Protein G purification
<b>Source:</b> Mouse	<b>GeneID (NCBI):</b> 2637	<b>CloneNo.:</b> 4F3E4
<b>Isotype:</b> IgG1	<b>UNIPROT ID:</b> P52951	
<b>Immunogen Catalog Number:</b> AG17109	<b>Full Name:</b> gastrulation brain homeobox 2	
	<b>Calculated MW:</b> 348 aa, 37 kDa	
	<b>Observed MW:</b> 37 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, Indirect ELISA

**Species Specificity:**  
human, mouse

## Background Information

Gastrulation Brain Homeobox 2 (GBX2) is a transcription factor belonging to the homeobox gene family, which plays a critical role in embryonic development, particularly in brain patterning and neural differentiation. It is highly conserved across vertebrates and is essential for the proper formation of the midbrain-hindbrain boundary and the development of the cerebellum. GBX2 is expressed in specific regions of the developing central nervous system and regulates downstream target genes involved in cell fate determination and tissue morphogenesis. Dysregulation or mutations in GBX2 have been associated with developmental disorders and may contribute to tumorigenesis in certain cancers. (PMID: 11063941; PMID: 31758726)

## Storage

**Storage:**  
Store at -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
PBS only, pH7.3

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

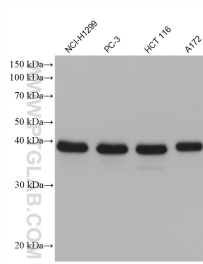
T: 4006900926

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

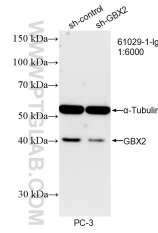
W: [ptgcn.com](http://ptgcn.com)

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

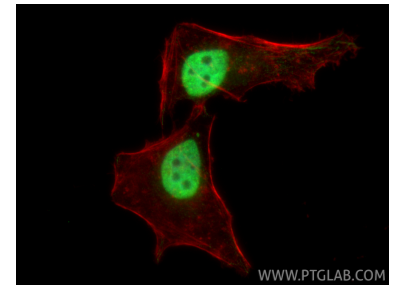
## Selected Validation Data



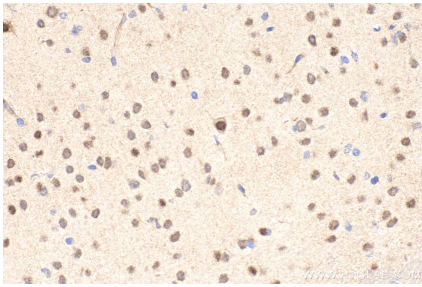
Various lysates were subjected to SDS PAGE followed by western blot with 61029-1-Ig (GBX2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 61029-1-PBS in a different storage buffer formulation.



WB result of GBX2 antibody (61029-1-Ig; 1:6000; incubated at room temperature for 1.5 hours) with sh-Control and sh-GBX2 transfected PC-3 cells. This data was developed using the same antibody clone with 61029-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using GBX2 antibody (61029-1-Ig, Clone: 4F3E4 ) at dilution of 1:800 and CoraLite@488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1), CL594-phalloidin (red). This data was developed using the same antibody clone with 61029-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 61029-1-Ig (GBX2 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 61029-1-PBS in a different storage buffer formulation.