

For Research Use Only

# OLIG2 Polyclonal antibody

Catalog Number: 13999-1-AP **81 Publications**



## Basic Information

<b>Catalog Number:</b> 13999-1-AP	<b>GenBank Accession Number:</b> BC047511	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul, Concentration: 600 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 10215	<b>Recommended Dilutions:</b> WB 1:1000-1:8000
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q13516	IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
<b>Isotype:</b> IgG	<b>Full Name:</b> oligodendrocyte lineage transcription factor 2	IHC 1:500-1:2000 IF-P 1:250-1:1000 IF-Fro 1:200-1:800
<b>Immunogen Catalog Number:</b> AG5089	<b>Calculated MW:</b> 32 kDa	
	<b>Observed MW:</b> 32-36 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF-P, IF-Fro, IP, ELISA

**Cited Applications:**  
WB, IHC, IF

**Species Specificity:**  
human, mouse, rat

**Cited Species:**  
human, mouse, rat, bovine, sheep

**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:** mouse brain tissue, rat brain

**IP:** mouse brain tissue,

**IHC:** mouse brain tissue, human gliomas tissue, rat brain tissue

**IF-P:** rat brain tissue,

**IF-Fro:** mouse brain tissue,

## Background Information

OLIG2, also named as BHLHB1, BHLHE19, PRKCBP2 and RACK17, is required for oligodendrocyte and motor neuron specification in the spinal cord, as well as for the development of somatic motor neurons in the hindbrain. Cooperates with OLIG1, OLIG2 establish the pMN domain of the embryonic neural tube. Antagonist of V2 interneuron and of NIKX2-2-induced V3 interneuron development. OLIG2 is widely expressed in subsets of glia cells and progenitors, and it is strongly induced at different sites by both acute and chronic injury, albeit with different mechanisms. OLIG2 acts as a repressor of neurogenesis in cells reacting to brain injury. It may represent an effective approach towards evoking neuronal repair from parenchymal precursors.(PMID:19390819)

## Notable Publications

Author	Pubmed ID	Journal	Application
Lirong Liang	34585785	J Pineal Res	WB
Yizi Zhu	36142668	Int J Mol Sci	IF
Angela M Lager	30213958	Nat Commun	IF

## Storage

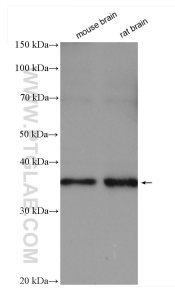
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

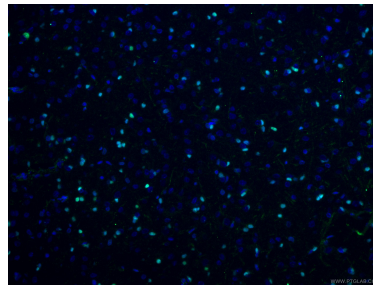
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

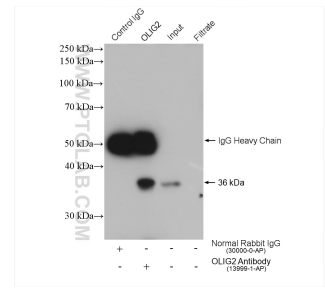
## Selected Validation Data



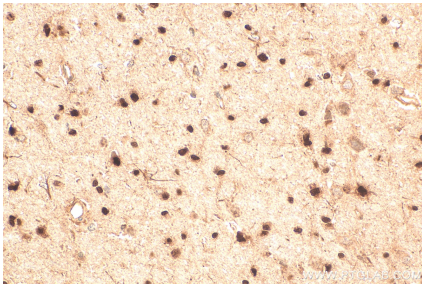
Various lysates were subjected to SDS PAGE followed by western blot with 13999-1-AP (OLIG2 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



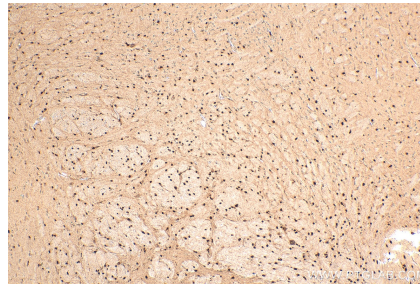
Immunofluorescent analysis of (4% PFA) fixed rat brain tissue using 13999-1-AP (OLIG2 antibody), at dilution of 1:500 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



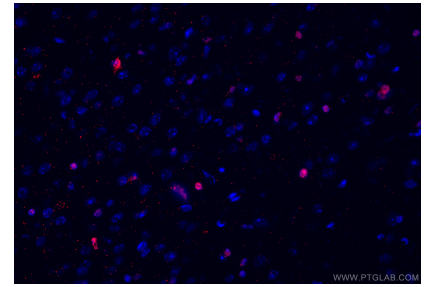
IP result of anti-OLIG2 (IP:13999-1-AP, 4ug; Detection:13999-1-AP 1:1000) with mouse brain tissue lysate 1600 ug.



Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 13999-1-AP (OLIG2 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 13999-1-AP (OLIG2 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse brain tissue using OLIG2 antibody (13999-1-AP) at dilution of 1:400 and CoraLite@594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4).