

For Research Use Only

# Alpha Synuclein Monoclonal antibody

Catalog Number: 66412-1-Ig **3 Publications**



## Basic Information

<b>Catalog Number:</b> 66412-1-Ig	<b>GenBank Accession Number:</b> BC013293	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul , Concentration: 1400 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 6622	<b>CloneNo.:</b> 1B10E9
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P37840	<b>Recommended Dilutions:</b> WB 1:500-1:2000 IHC 1:500-1:2000 IF-P 1:200-1:800
<b>Isotype:</b> IgG2a	<b>Full Name:</b> synuclein, alpha (non A4 component of amyloid precursor)	
<b>Immunogen Catalog Number:</b> AG1285	<b>Calculated MW:</b> 14 kDa	
	<b>Observed MW:</b> 18-19 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF-P, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> IHC, IF	<b>WB :</b> mouse brain tissue, rat brain tissue
<b>Species Specificity:</b> human, mouse, rat	<b>IHC :</b> mouse cerebellum tissue, human brain tissue, mouse brain tissue
<b>Cited Species:</b> human, rat	<b>IF-P :</b> mouse cerebellum tissue,
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

Alpha Synuclein ( $\alpha$ -syn) is a 14-19 kDa phosphoprotein that is primarily localized to the presynaptic terminals of mature neurons, where it is involved in synaptic function and plasticity.  $\alpha$ -syn has drawn intense interest ever since the late 1990s, when the first  $\alpha$ -synuclein missense mutation was identified as a cause of familial Parkinson's disease (PD). Aggregated and hyper-phosphorylated forms of  $\alpha$ -syn protein are the pathological hallmark of Lewy body disease, which includes Parkinson's disease (PD), diffuse Lewy body disease (DLBD), and Lewy body variant of Alzheimer's disease (LBV). This antibody can recognize all the isoforms of  $\alpha$ -syn.

## Notable Publications

Author	Pubmed ID	Journal	Application
Li-Hua Bian	35728354	Biomed Pharmacother	IHC
Jihua Shi	36795141	Appl Microbiol Biotechnol	IF
Wenfeng Liu	31750928	J Neuropathol Exp Neurol	IHC

## Storage

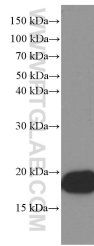
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

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

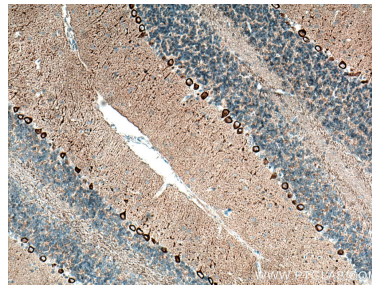
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

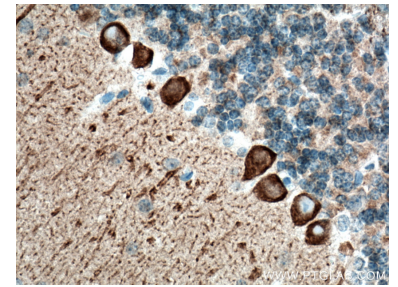
## Selected Validation Data



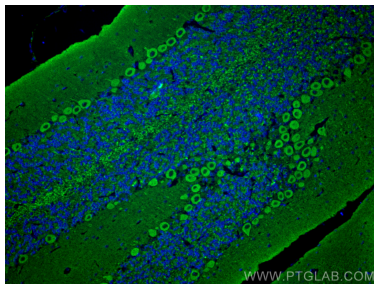
mouse brain tissue were subjected to SDS PAGE followed by western blot with 66412-1-Ig (α-Synuclein Antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



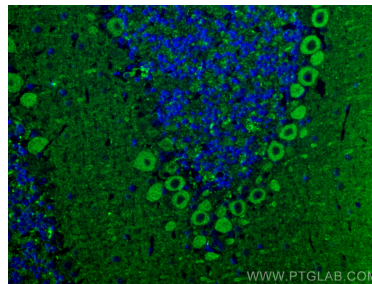
Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue slide using 66412-1-Ig (alpha-Synuclein antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



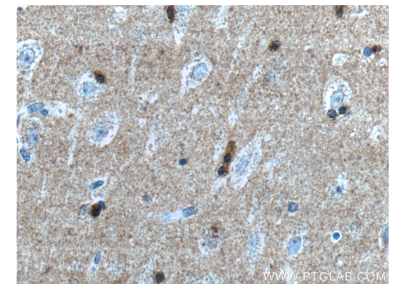
Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue slide using 66412-1-Ig (alpha-Synuclein antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse cerebellum tissue using Alpha Synuclein antibody (66412-1-Ig, Clone: 1B10E9) at dilution of 1:400 and Multi-rAb CoraLite® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse cerebellum tissue using Alpha Synuclein antibody (66412-1-Ig, Clone: 1B10E9) at dilution of 1:400 and Multi-rAb CoraLite® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human brain tissue slide using 66412-1-Ig (α-Synuclein antibody) at dilution of 1:500 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).