

For Research Use Only

# Alpha Synuclein Monoclonal antibody, PBS Only (Detector)

Catalog Number: 66412-1-PBS



## Basic Information

<b>Catalog Number:</b> 66412-1-PBS	<b>GenBank Accession Number:</b> BC013293	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 6622	<b>CloneNo.:</b> 1B10E9
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P37840	
<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

**Tested Applications:**  
WB, IHC, IF-P, Sandwich ELISA, Indirect ELISA, Sample test

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

## Product Information

66412-1-PBS targets Alpha Synuclein as part of a matched antibody pair:

MP50043-1: 60285-1-PBS capture and 66412-1-PBS detection (validated in Sandwich ELISA)

Unconjugated mouse monoclonal antibody pair in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## 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.

## Storage

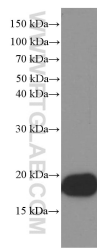
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

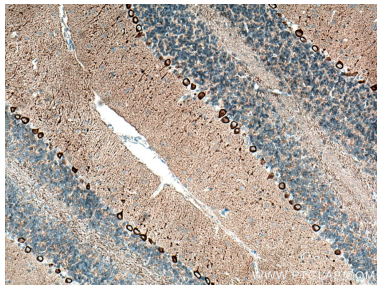
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

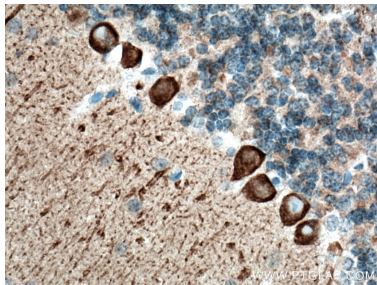
Selected Validation Data



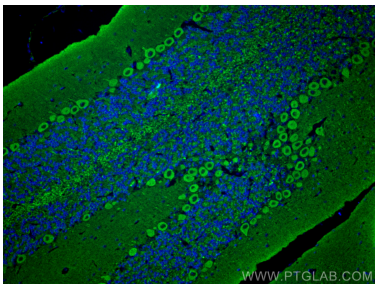
mouse brain tissue were subjected to SDS PAGE followed by western blot with 66412-1-Ig (a-Synuclein Antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66412-1-PBS in a different storage buffer formulation.



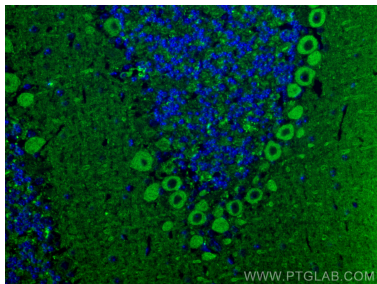
Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue slide using 66412-1-Ig (alpha-Synuclein antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66412-1-PBS in a different storage buffer formulation.



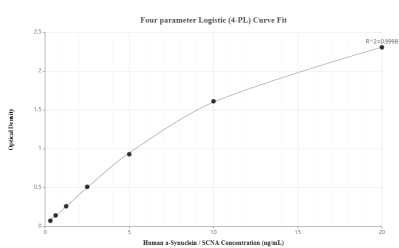
Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue slide using 66412-1-Ig (alpha-Synuclein antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66412-1-PBS in a different storage buffer formulation.



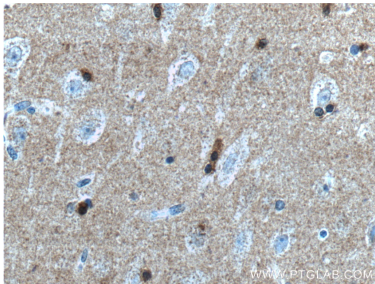
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse cerebellum tissue using Alpha Synuclein antibody (66412-1-Ig, Clone: 1B10E9) at dilution of 1:400 and Multi-rAb CoraLite® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM002). Heat mediated antigen retrieval with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



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). This data was developed using the same antibody clone with 66412-1-PBS in a different storage buffer formulation.



Sandwich ELISA standard curve of MP50043-1, a-Synuclein Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 60285-1-PBS. Detection antibody: 66412-1-PBS. Standard: Ag1285. Range: 0.313-20 ng/mL.



Immunohistochemical analysis of paraffin-embedded human brain tissue slide using 66412-1-Ig (a-Synuclein antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66412-1-PBS in a different storage buffer formulation.