

For Research Use Only

# Prion protein PrP Polyclonal antibody, PBS Only

Catalog Number: 12555-1-PBS



## Basic Information

<b>Catalog Number:</b> 12555-1-PBS	<b>GenBank Accession Number:</b> BC022532	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5621	
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> F7VJQ1	
<b>Isotype:</b> IgG	<b>Full Name:</b> prion protein	
<b>Immunogen Catalog Number:</b> AG3257	<b>Calculated MW:</b> 34 kDa	
	<b>Observed MW:</b> 30 kDa	

## Applications

**Tested Applications:**  
WB, IHC, FC (Intra), IP, Indirect ELISA

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

## Background Information

Prion protein (PRNP) is a ubiquitous membrane glycoprotein whose abnormal self-replicating, misfolded form is widely believed to cause several central nervous system disorders, collectively known as Transmissible Spongiform Encephalopathies (TSE). Prion diseases are TSEs, attributed to conformational conversion of the cellular prion protein (PrPC) into an abnormal conformer that accumulates in the brain. The two isoforms, PrPC and PrP<sup>S</sup>, have the same primary amino acid sequence and only differ in conformation. While PrPC is composed of 42%  $\alpha$ -helix and only 3%  $\beta$ -sheet, PrP<sup>S</sup> is composed of 30%  $\alpha$ -helix and 43%  $\beta$ -sheet. PrPC converts to its pathogenic isoform when the region corresponding to the residues 108-144 fold into  $\beta$ -sheets. PrPC is very soluble in detergents and easily digested by proteases while the PrP<sup>S</sup> is insoluble in detergents and resistant to protease digestion. Prion diseases exist in infectious, sporadic, and genetic forms.

## Storage

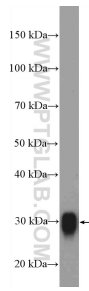
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS only

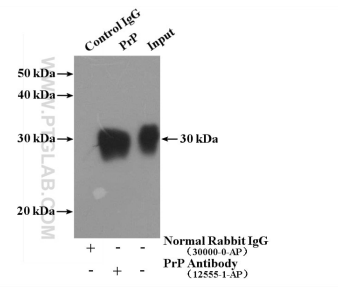
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)      E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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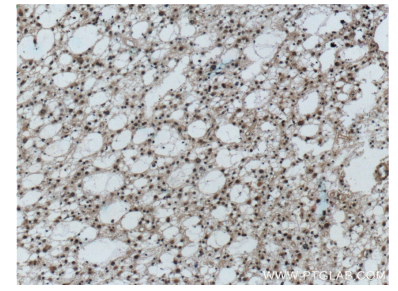
## Selected Validation Data



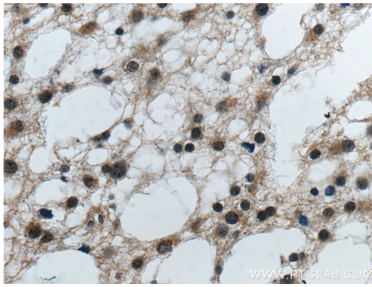
mouse brain tissue were subjected to SDS PAGE followed by western blot with 12555-1-AP (PrP Antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 12555-1-PBS in a different storage buffer formulation.



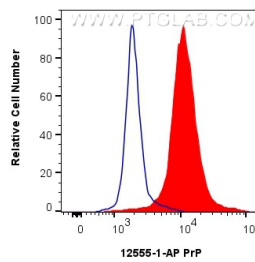
IP result of anti-PrP (IP:12555-1-AP, 4ug; Detection:12555-1-AP 1:1000) with mouse brain tissue lysate 4000ug. This data was developed using the same antibody clone with 12555-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 12555-1-AP (PrP Antibody) at dilution of 1:200 (under 10x lens). This data was developed using the same antibody clone with 12555-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 12555-1-AP (PrP Antibody) at dilution of 1:200 (under 40x lens). This data was developed using the same antibody clone with 12555-1-PBS in a different storage buffer formulation.



$1 \times 10^6$  SH-SY5Y cells were intracellularly stained with 0.4 ug Anti-Human PrP (12555-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 12555-1-PBS in a different storage buffer formulation.