

For Research Use Only

PrP Polyclonal antibody

Catalog Number: 12555-1-AP **5 Publications**



Basic Information

Catalog Number: 12555-1-AP	GenBank Accession Number: BC022532	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 500 µg/ml by Nanodrop;	GeneID (NCBI): 5621	Recommended Dilutions: WB 1:500-1:2000 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate IHC 1:20-1:200
Source: Rabbit	Full Name: prion protein	
Isotype: IgG	Calculated MW: 34 kDa	
Immunogen Catalog Number: AG3257	Observed MW: 30 kDa	

Applications

Tested Applications: FC, IHC, IP, WB, ELISA	Positive Controls:
Cited Applications: CoIP, IHC, IP, WB	WB: mouse brain tissue, human brain tissue, rat brain tissue
Species Specificity: human, mouse, rat	IP: mouse brain tissue,
Cited Species: human, mouse	IHC: human gliomas tissue,

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

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 PrPS, have the same primary amino acid sequence and only differ in conformation. While PrPC is composed of 42% α -helix and only 3% β -sheet, PrPS is composed of 30% α -helix and 43% β -sheet. PrPC converts to its pathogenic isoform when the region corresponding to the residues 108-144 fold into β -sheets. PrPC is very soluble in detergents and easily digested by proteases while the PrPS is insoluble in detergents and resistant to protease digestion. Prion diseases exist in infectious, sporadic, and genetic forms.

Notable Publications

Author	Pubmed ID	Journal	Application
Frank F Heisler	30174115	Neuron	WB,IP
Fei Liu	36003082	Front Mol Biosci	IHC
Yosuke Omae	31020675	Transfusion	WB

Storage

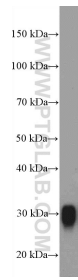
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

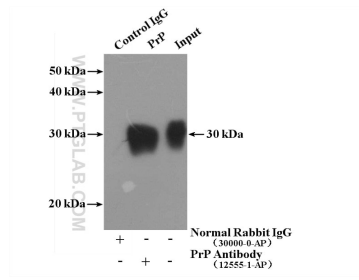
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

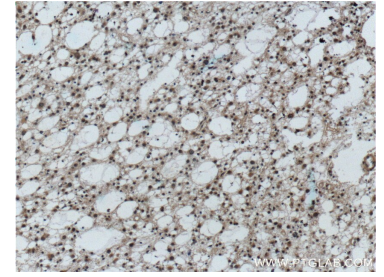
Selected Validation Data



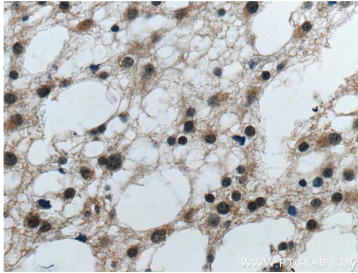
mouse brain tissue were subjected to SDS PAGE followed by western blot with 12555-1-AP (PrP Antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



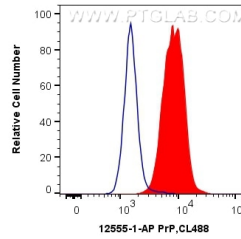
IP Result of anti-PrP (IP:12555-1-AP, 4ug; Detection:12555-1-AP 1:1000) with mouse brain tissue lysate 4000ug.



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 12555-1-AP (PrP Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 12555-1-AP (PrP Antibody) at dilution of 1:200 (under 40x lens).



1X10⁶ 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 Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).