

PrP Polyclonal Antibody

Catalog number: 12555-1-AP

Size: 38 µg/150 µl

Source: Rabbit

Isotype: IgG

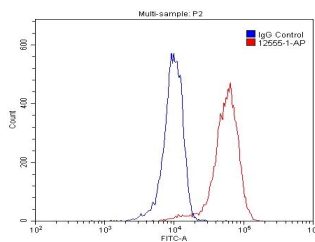
Synonyms:

PRNP; ASCR, CD230, CJD, GSS,

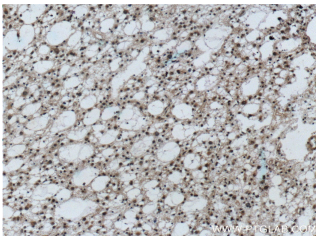
Major prion protein, prion,

prion protein, PRIP, PRNP, PrP,

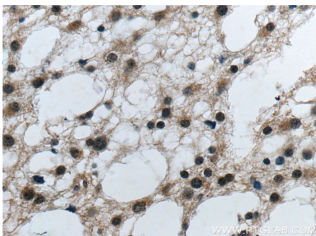
PrP27 30, PrP33 35C, PrPc



1X10⁶ SH-SY5Y cells were stained with 0.2µg PrP antibody (12555-1-AP, red) and control antibody (blue). Fixed with 4% PFA blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1500.



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



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

Background

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 PrPSc, 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, PrPSc 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 PrPSc is insoluble in detergents and resistant to protease digestion. Prion diseases exist in infectious, sporadic, and genetic forms.

Applications

| | |
|--------------------------|--|
| Tested applications: | ELISA, WB, IHC, IP, FC |
| Species specificity: | Human, Mouse, Rat; other species not tested. |
| Calculated PrP MW: | 34 kDa |
| Observed PrP MW: | 30 kDa |
| Positive WB detected in | Mouse brain tissue, human brain tissue, rat brain tissue |
| Positive IP detected in | Mouse brain tissue |
| Positive IHC detected in | Human gliomas tissue, human pancreas cancer tissue |
| Positive FC detected in | SH-SY5Y cells |
| Recommended dilution: | WB: 1:500-1:5000 IP: 1:500-1:5000 IHC: 1:20-1:200 FC: N/A |

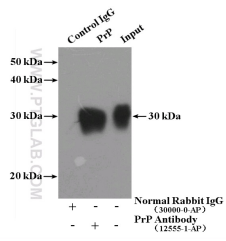
Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

Immunogen information

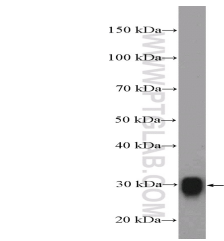
| | |
|---------------------------|---------------|
| Immunogen: | Ag3257 |
| GenBank accession number: | BC022532 |
| Gene ID (NCBI): | 5621 |
| Full name: | Prion protein |

Product information

| | |
|----------------------|---|
| Purification method: | Antigen affinity purification |
| Storage: | PBS with 0.1% sodium azide and 50% glycerol pH 7.3. Store at -20°C. |



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



mouse brain tissue were
subjected to SDS PAGE
followed by western blot with
12555-1-AP(PrP Antibody) at
dilution of 1:1000