

Anti-Prion Protein PRNP Rabbit Monoclonal Antibody
Catalog # ABO14150

Specification

Anti-Prion Protein PRNP Rabbit Monoclonal Antibody - Product Information

Application	WB, IHC, IF, ICC, FC
Primary Accession	P04156
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

Description

Anti-Prion Protein PRNP Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-Prion Protein PRNP Rabbit Monoclonal Antibody - Additional Information

Gene ID 5621

Other Names

Major prion protein, PrP, ASCR, PrP27-30, PrP33-35C, CD230, PRNP, ALTPRP, PRIP, PRP

Calculated MW

27661 MW KDa

Application Details

WB 1:1000-1:2000
IHC 1:50-1:200
ICC/IF 1:50-1:200
FC 1:50

Subcellular Localization

Cell membrane; Lipid-anchor, GPI-anchor. Golgi apparatus. Targeted to lipid rafts via association with the heparan sulfate chains of GPC1. Colocates, in the presence of CU (2+), to vesicles in para- and perinuclear regions, where both proteins undergo internalization. Heparin displaces PRNP from lipid rafts and promotes endocytosis.

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human Prion Protein

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-Prion Protein PRNP Rabbit Monoclonal Antibody - Protein Information

Name PRNP

Synonyms ALTPRP, PRIP, PRP

Function

Its primary physiological function is unclear. May play a role in neuronal development and synaptic plasticity. May be required for neuronal myelin sheath maintenance. May promote myelin homeostasis through acting as an agonist for ADGRG6 receptor. May play a role in iron uptake and iron homeostasis. Soluble oligomers are toxic to cultured neuroblastoma cells and induce apoptosis (in vitro) (By similarity). Association with GPC1 (via its heparan sulfate chains) targets PRNP to lipid rafts. Also provides Cu(2+) or Zn(2+) for the ascorbate-mediated GPC1 deaminase degradation of its heparan sulfate side chains (By similarity).

Cellular Location

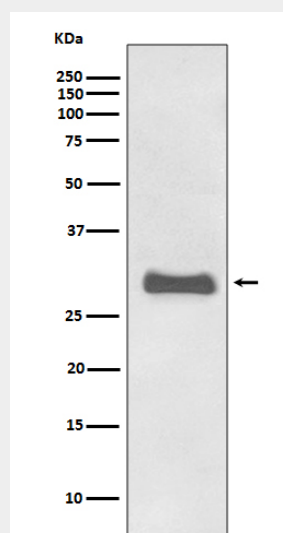
Cell membrane; Lipid-anchor, GPI-anchor. Golgi apparatus {ECO:0000250|UniProtKB:P04925}. Note=Targeted to lipid rafts via association with the heparan sulfate chains of GPC1. Colocates, in the presence of Cu(2+), to vesicles in para- and perinuclear regions, where both proteins undergo internalization. Heparin displaces PRNP from lipid rafts and promotes endocytosis.

Anti-Prion Protein PRNP Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Prion Protein PRNP Rabbit Monoclonal Antibody - Images



Western blot analysis of Prion Protein expression in Hunam fetal brain lysate.

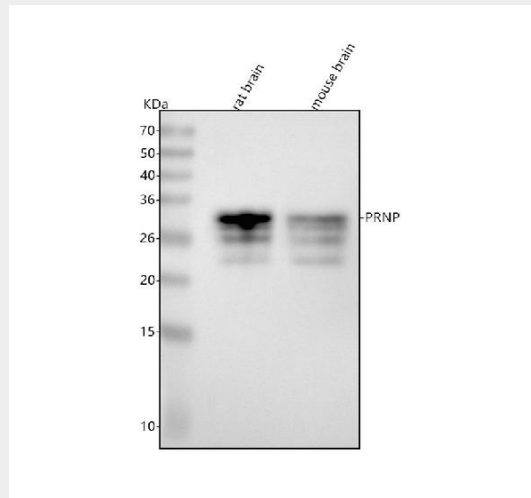


Figure 1. Western blot analysis of PRNP using anti-PRNP antibody (M02447).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat brain tissue lysates,

Lane 2: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PRNP antigen affinity purified monoclonal antibody (Catalog # M02447) at 1:1000 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for PRNP at approximately 30 kDa. The expected band size for PRNP is at 28 kDa.