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Anti-PRNP Antibody

Catalog # ABO11104

Product Information

Application	WB, IHC-P
Primary Accession	P04925
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Major prion protein(PRNP) detection. Tested with WB, IHC-P in Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	19122
Other Names	Major prion protein, PrP, PrP27-30, PrP33-35C, CD230, Prnp, Prn-p, Prp
Calculated MW	27977
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Rat, Mouse, By Heat Western blot, 0.1-0.5 □g/ml, Rat, Mouse
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. .
Tissue Specificity	Highly expressed in the brain, lung, kidney and heart. Expressed at low levels in the liver and spleen. .
Source	Eukaryota
Protein Name	Major prion protein(PrP)
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of mouse PRNP (143-159aa DWEDRYYRENMYRYPNQ), identical to the related rat sequence.

Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Protein Information

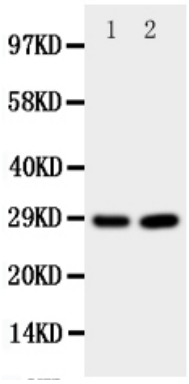
Name	Prnp
Synonyms	Prn-p, Prp
Function	Its primary physiological function is unclear. May play a role in neuronal development and synaptic plasticity. May be required for neuronal myelin sheath maintenance. May promote myelin homeostasis through acting as an agonist for ADGRG6 receptor. May play a role 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 (PubMed:12732622, PubMed:16492732, PubMed:19242475, PubMed:19568430).
Cellular Location	Cell membrane; Lipid-anchor, GPI-anchor. Golgi apparatus. 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
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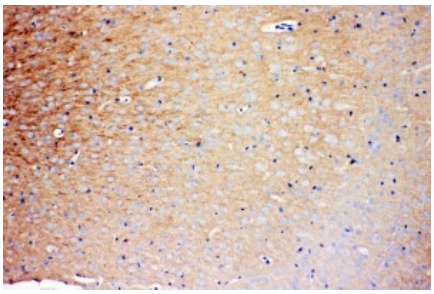
Background

PRNP(prion protein), also known as CD230 and PRP, is a protein that in humans is encoded by the PRNP gene. The major prion protein is expressed in the brain and several other tissues. Expression is most predominant in the nervous system but occurs in many other tissues throughout the body. Puckett et al.(1991)identified a RFLP with a high degree of heterozygosity in the 5-prime region of the PRNP gene, which might serve as a useful marker for the pter-p12 region of chromosome 20. PRNP is associated with a variety of cognitive deficiencies and neurodegenerative diseases such as Creutzfeldt-Jakob disease, bovine spongiform encephalopathy, and kuru. PRNP is highly conserved through mammals, lending credence to application of conclusions from test animals such as mice. Comparison between primates is especially similar, ranging from 92.9-99.6% similarity in amino acid sequences.

Images

Anti-PRNP antibody, ABO11104, Western blottingAll lanes: Anti PRNP (ABO11104) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Rat Brain Tissue Lysate at 50ugPredicted bind size: 28KDObserved bind size: 28KD





Anti-PRNP antibody, ABO11104, IHC(P)IHC(P): Rat Brain Tissue

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.