

PRNP Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP2865c**Specification**

PRNP Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [P04156](#)**PRNP Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 5621**Other Names**

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

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP2865c](/products/AP2865c) was selected from the Center region of human PRNP. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PRNP Antibody (Center) Blocking Peptide - 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.

PRNP Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

PRNP Antibody (Center) Blocking Peptide - Images

PRNP Antibody (Center) Blocking Peptide - Background

PRNP is a membrane glycosylphosphatidylinositol-anchored glycoprotein that tends to aggregate into rod-like structures. This protein contains a highly unstable region of five tandem octapeptide repeats. Mutations in the repeat region as well as elsewhere in PRNP gene have been associated with Creutzfeldt-Jakob disease, fatal familial insomnia, Gerstmann-Straussler disease, Huntington disease-like 1, and kuru.

PRNP Antibody (Center) Blocking Peptide - References

Cervenakova L., Bueteifisch C., Lee H.S., Taller I., Stone G., Gibbs C.J. Jr., Brown P., Hallett M., Goldfarb L.G. Am. J. Med. Genet. 88:653-656(1999) Perry R.T., Go R.C., Harrell L.E., Acton R.T. Am. J. Med. Genet. 60:12-18(1995) NMR structures of three single-residue variants of the human prion protein. Proc. Natl. Acad. Sci. U.S.A. 97:8340-8345(2000)