

Goat Anti-Prion Protein (143-153) Antibody Peptide-affinity purified goat antibody Catalog # AF1864a

### **Specification**

# Goat Anti-Prion Protein (143-153) Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, E P04156 NP\_898902, 5621, 19122 (mouse), 24686 (rat) Human Pig Goat Polyclonal 100ug/200ul IgG 27661

## Goat Anti-Prion Protein (143-153) Antibody - Additional Information

Gene ID 5621

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

Dilution WB~~1:1000 E~~N/A

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-Prion Protein (143-153) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### Goat Anti-Prion Protein (143-153) 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.

## Goat Anti-Prion Protein (143-153) Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Goat Anti-Prion Protein (143-153) Antibody - Images



AF1864a (0.3  $\mu$ g/ml) staining of Human Brain lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

#### Goat Anti-Prion Protein (143-153) Antibody - Background

The protein encoded by this gene is a membrane glycosylphosphatidylinositol-anchored glycoprotein that tends to aggregate into rod-like structures. The encoded protein contains a highly unstable region of five tandem octapeptide repeats. This gene is found on chromosome 20, approximately 20 kbp upstream of a gene which encodes a biochemically and structurally similar protein to the one encoded by this gene. Mutations in the repeat region as well as elsewhere in this gene have been associated with Creutzfeldt-Jakob disease, fatal familial insomnia,



Gerstmann-Straussler disease, Huntington disease-like 1, and kuru. Alternative splicing results in multiple transcript variants encoding the same protein.

## Goat Anti-Prion Protein (143-153) Antibody - References

Lack of association between PRNP M129V polymorphism and multiple sclerosis, mild cognitive impairment, alcoholism and schizophrenia in a Korean population. Choi IG, et al. Dis Markers, 2010 Jan 1. PMID 20592456.

Polymorphisms of the prion protein gene (PRNP) in a Serbian population. Dimitrijevi? R, et al. Int J Neurosci, 2010 Jul. PMID 20583902.

Intermediate phenotypes identify divergent pathways to Alzheimer's disease. Shulman JM, et al. PLoS One, 2010 Jun 21. PMID 20574532.

Prion protein expression and the M129V polymorphism of the PRNP gene in patients with colorectal cancer. Antonacopoulou AG, et al. Mol Carcinog, 2010 Jul. PMID 20564346.

Defining sporadic Creutzfeldt-Jakob disease strains and their transmission properties. Bishop MT, et al. Proc Natl Acad Sci U S A, 2010 Jun 29. PMID 20547859.