

## **Product datasheet for TA300958**

#### OriGene Technologies, Inc.

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### Prion protein PrP (PRNP) Rabbit Monoclonal Antibody [Clone ID: EP1802Y]

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: EP1802Y
Applications: FC, IHC, WB

Recommended Dilution: WB: 1:5000 - 1:10000; FC: 1:200; IHC-P: Use at an assay dependent dilution; ICC/IF: 1:100 -

1:250

**Reactivity:** Mouse, Rat, Human

Host: Rabbit Isotype: IgG

Clonality: Monoclonal

**Immunogen:** A synthetic peptide corresponding to residues near the C-terminus of human Prp was used

as an immunogen.

Formulation: PBS 49%,Sodium azide 0.01%,Glycerol 50%,BSA 0.05%

**Purification:** Tissue culture supernatant

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

Predicted Protein Size: 28 kDa

Gene Name: prion protein

Database Link: NP 898902

Entrez Gene 19122 MouseEntrez Gene 24686 RatEntrez Gene 5621 Human

F7VJQ1





### Background:

Prion diseases are transmissible neurodegenerative disorders which affect a range of mammalian species. In humans they can be inherited and sporadic as well as acquired by exposure to human prions. Prions appear to be composed principally of a conformational isomer of host-encoded prion protein and propagate by recruitment of cellular prion protein (1). The function of the cellular prion protein (PrP) is still poorly understood. It has been proposed that one unprecedented role for PrP is against Bax-mediated neuronal apoptosis. It has been shown that PrP potently inhibits Bax-induced cell death in human primary neurons (2). An impaired synaptic inhibition may be involved in the epileptiform activity seen in Creutzfeldt-Jakob and other neurodegenerative diseases and it is believed that loss of function of PrP may contribute to the early synaptic loss and neuronal degeneration seen in these diseases (3).

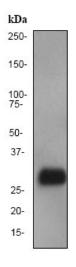
Synonyms: AltPrP; ASCR; CD230; CJD; GSS; KURU; p27-30; PRIP; PrP; PrP27-30; PrP33-35C; PrPc

Note: Is unsuitable for IP.

**Protein Families:** ES Cell Differentiation/IPS, Stem cell - Pluripotency, Transmembrane

**Protein Pathways:** Prion diseases

# **Product images:**

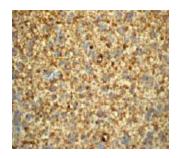


Western blot - Prion protein PrP antibody [EP1802Y]; Anti-Prion protein PrP antibody [EP1802Y] at 1/10000 dilution + fetal brain lysate at 10 ug.Secondary.HRP-labelled goat anti-rabbit at 1/2000 dilution.Predicted band size: 28 kDa.

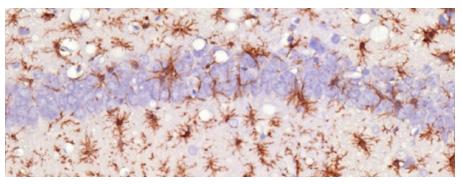




Western blot; Anti-Prion protein PrP antibody [EP1802Y] at 1/5000 dilution + Mouse Prion protein PrP full length protein at 0.01 ug.Secondary.Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (HRP), pre-adsorbed at 1/5000 dilution.developed using the ECL technique.Performed under reducing conditions.Exposure time: 10 seconds



Immunohistochemistry (Paraffin-embedded sections) - Prion protein PrP antibody [EP1802Y]; Immunohistochemical analysis of brain glioma using TA300958 at a dilution of 1/100-1/250.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Prion protein PrP antibody [EP1802Y]; Immunohistochemical analysis of Prion-infected mouse brain tissue, staining Prion protein PrP with TA300958. Antigen retrieval was performed by heat mediation in a citrate buffer (pH 6) before incubating with primary antibody (1/7000) overnight at 4°C. Staining was detected using DAB.



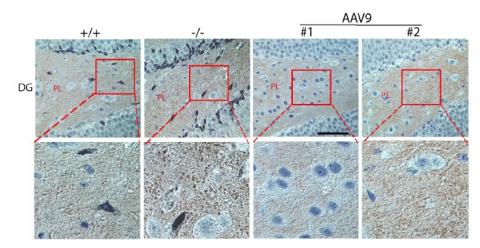
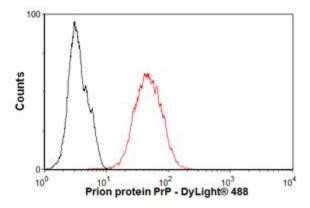


Figure from citation: Immunohistochemistry of PRNP protein level by using anti-PRNP antibody in mouse brain tissue sections. Prnp-positive signals were stained brown. +/+: wt mice; -/-: nontreated MPS IIIB mice; AAV9: rAAV9-treated MPS IIIB mice; #1: mouse with low Prnp IHC intensity; #2: mouse with high Prnp IHC intensity; DG: dentate gyrus of hippocampus. PL: polymoph layer of DG. Scale bar: 50 um. <u>View Citation</u>



Flow Cytometry-Anti-Prion protein PrP antibody (TA300958); Overlay histogram showing SH-SY5Y cells stained with TA300958 (red line). The secondary antibody used was DyLight 488 goat anti-rabbit IgG (H+L) at 1:500. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1ug/1x10^6 cells) used under the same conditions. This antibody gave a positive signal in SH-SY5Y cells under the same conditions.