Anti-Prion protein antibody, mouse monoclonal (7A1)

65-903　50　μg　　65-904　　250　μg

Prion protein PrP is a membrane glycosylphosphatidylinositol(GPI) anchored glycoprotein highly expressed in neuron and glia cells as well as immune and reproductive cells. Mutations in the octapeptide repeat regions as well as elsewhere in this gene have been associated with neurodegenerative diseases such as Creutzfeldt Jakob disease, fatal familial insomnia, Gerstmann Straussler disease, Huntington disease like 1, and kuru. The infectious isoform of PrP^{C}, known as PrP^{Sc}, is able to convert normal PrP^{C} proteins into the infectious isoform,which is insoluble amyloid aggregate, by changing their conformation (1)

Both PrP is encoded as a protein of ~ 250 amino acids and the mature protein consists of 209 amino acids. Several topological forms exist; one cell surface form anchored via glycolipid and two transmembrane forms, which is responsible for the formation multiple bands in SDS-PAGE (Figure).

Applications

1) Western blotting (~0.5　μg/ml)　2) ELISA .

Other applications have not been tested

Immunogen: Recombinant human PrP lacking GPI anchor expressed and purified from rabbit kidney cell line RK13.

Reactivity: Reacts with human Prion but not with mouse prion. Other species not tested.

Antibody: Mouse monoclonal antibody, IgG. The hybridoma was established in the laboratory of Prof. N. Kitamoto at University of Hyogo.

Form: Purified IgG 1 mg/ml in PBS(-), 50% glycerol, filter-sterilized (azide-free)

Storage: －20℃

Reference: This antibody has been used in Ref.2

1. Sakudo A, et al. J Vet. Med. Sci. 69, 329-337 (2007) Review
2. Sakudo A, et al. Int. J. Mol. Med. 21: 217-222 (2008)
3. Grathwohl KU, et al. J Virol. Methods 64, 205-216 (1997)

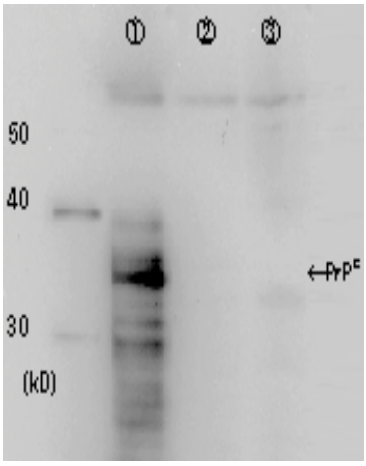

Figure Identification of Prion protein in crude cell extract by western blotting with monoclonal antibody 2C5-5

Lane1. Extract of rabbit kidney cells RK13,overexpressing prion protein. Lane 2. Negative control; extract of the vector infected cells. Lane 3. Negative control; extract of RK13 cells.

Related Product: 65-901 anti-Prion antibody, clone 2C5-5 (most suitable for ELISA)

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