

## anti-recombinant bovine prion protein (PrP)

Cat.no: **27410011**

100 µg in 100 µl

**Introduction:** Prion diseases or transmissible spongiform encephalopathies are neuro-degenerative diseases that affect both humans and animals (Prusiner 1998). All prion diseases share the same molecular pathogenic mechanism that involves conversion of normal cellular prion protein (PrP<sup>c</sup>) into a form that is insoluble in non ionic detergent and partially resistant to proteases (PrP<sup>sc</sup>) (Pan et al. 1993). Both PrP<sup>sc</sup> and PrP<sup>c</sup> are encoded within a single exon of a chromosomal gene as a protein of ~ 250 amino acids (Basler et al. 1986). Many mammalian PrPs have a 22 amino acid N-terminal signal sequence (Hope et al. 1986; Turk et al. 1988) and 23 amino acid C-terminal signal sequence encoding for attachment of a glycosylphosphatidylinositol anchor (Stahl et al. 1987, 1990). The mature protein of 209 amino acids contains one disulfide bond (Turk et al. 1988) and has two sites of asparagine-linked glycosylation (Endo et al. 1989; Oesch et al. 1995).

### Product description:

The polyclonal antiserum from rabbit recognizes recombinant bovine PrP (immunogen expressed in *E. coli*), bovine, murine and human natural PrP<sup>c</sup> and conformational changed PrP<sup>c</sup> (PrP<sup>sc</sup>) in Western blot and ELISA.

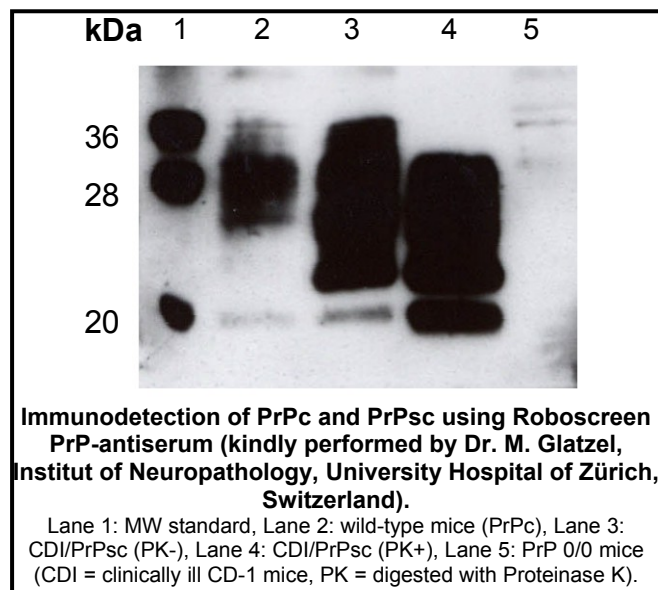
**Purity:** undiluted serum

### Stability and storage:

Repeated freezing and thawing should be avoided.

### Applications:

The antibody is used for Western blot and ELISA (dilution 1:2000).



### References

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- \* Basler K, Oesch B, Scott M, Westaway D, Wälchli M, Groth DF, McKinley MP, Prusiner SB, Weissmann C (1986). Cell 46, 417-428.
- \* Hope J, Morton LJD, Farquhar CF, Multhaup G, Beyreuther K, Kimberlin RH (1986). EMBO J. 5, 2591-2597.
- \* Turk E, Teplow DB, Hood LE, Prusiner SB (1988). Eur. J. Biochem. 176, 21-30.
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- \* Endo T, Groth D, Prusiner SB, Kobata A (1989). Biochemistry 28, 8380-8388.
- \* Oesch B, Westaway D, Wälchli M, McKinley MP, Kent SBH, Aebersold R, Barry RA, Tempst P, Teplow DB, Hood LE, Prusiner SB, Weissmann C (1985). Cell 40, 735-746.

**Warning:** Sodium azide is harmful if swallowed (R22). Keep out of reach of children (S2). Keep away from food, drink, and animal feeding stuff (S13). Wear suitable protective clothing (S36). If swallowed, seek medical advice immediately and show this container or label (S46). Contact with acids liberates very toxic gas (R32). Azide compounds should be flushed with large volumes of water during disposal to avoid deposits in lead or copper plumbing where explosive conditions can develop.

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