

## Anti-PrP [P-clone] Standard Size Ab02195-3.0

This reformatted mouse antibody was made using the variable domain sequences of the original Mouse Fab format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Mouse IgG2b, Kappa

**Clone Number:** P-clone

**Alternative Name(s) of Target:** CD230; PRNP; Major prion protein; Major scrapie-associated fibril protein 1

**UniProt Accession Number of Target Protein:** P10279

**Published Application(s):** WB, ELISA

**Published Species Reactivity:** Bovine, Syrian hamster, Mouse, Human, Deer, Sheep

**Immunogen:** The original antibody was generated by immunizing mice with amino acid sequence 96-105 of bovine prion protein.

**Specificity:** This antibody binds amino acid residues 90-120 [ amino acids HG(S,N)QWNKPSKPKTN] or epitope I of the bovine prion protein. This epitope is also present in human PrP as well as in all ungulate PrP sequences, including cattle, deer, elk, kudu, goat, and sheep. This antibody doesn't bind the native disease-associated PrP conformer. It can only recognise the denatured or pretreated PrP, prepared by denaturation and/or proteolysis for peptide-like presentation.

**Application Notes:** Bovine spongiform encephalopathy (BSE) is a fatal neurodegenerative prion disease affecting cattle that is transmissible to humans, manifesting as a variant of Creutzfeldt-Jakob disease (vCJD) likely following the consumption of meat contaminated with BSE prions. This high affinity antibody can be used for detection of infectious prion in a sample. P clone has been used in the development of conformation dependent immunoassay for detection of prion protein in a sample. It can recognise prions from cow, sheep, human, deer, hamster in a western blot assay (PMID:12389035). P clone binds peptide derived from the unstructured region (aa90-105) of bovine PrP (BoPrP) with an affinity of 1pM (PMID: 16962610).

**Antibody First Published in:** Safar et al. Measuring prions causing bovine spongiform encephalopathy or chronic wasting disease by immunoassays and transgenic mice. Nat Biotechnol (2002); 20(11):1147-50. [PMID:12389035](#)

**Note on publication:** Describes the generation of conformation specific antibodies towards bovine prion protein to be used in a conformation dependant immunoassay.

## Product Form

**Size:** 200 µg Purified antibody.

**Purification:** Protein A affinity purified

**Supplied In:** PBS with 0.02% Proclin 300.

**Storage Recommendation:** Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.