Product Information

Edition: 2013-04-25

Prion protein specific mAb 100B3, mouse monoclonal antibody for detection of prion protein (PrP)

Article number:

100B3/200 for quantity 0.2mg IgG

100B3/500 for quantity 0.5mg IgG

Batch: 051112-PrP-100B3

Shipping: with cool pack

Storage: at 0-5°C ready for use (or aliquot and store at -20°C to avoid repeated freezing/thawing)

Quantity: 0.5mg or 0.2mg IgG (larger quantities on request)

Format: liquid (advice: briefly spin the vial in a centrifuge to dislodge any liquid from the cap)

Concentration: 0.63mg IgG per ml, (based on UV280nm measurement with factor 1.43AU@1cm) in PBS pH7.2 as buffer, with 0.02% sodium azide as preservative.

Clone name: 66.100B3

Isotype: IgG2a κ

Purification: purified from culture supernatant by Protein G column chromatograpy, followed by dialysis and 0.2µm membrane filtration.

PrP antigen gene name: Prnp

Immunogen: recombinant E.Coli wild-type PrP molecule for the bovine species (bovinePrP25-242).

Selection: $Prnp^{0/0}$ mice were injected with the immunogen and spleen cells were fused with SP2/0 myeloma cells.

Epitope: KRPKP (bovinePrP26-30; derived by Pepscan analysis and confirmed by blocking the binding to PrP with synthetic peptide).

Expected Species (cross) reactivity: broad (no known species differences in epitope sequence; tested on bovine, ovine, caprine, cervid and murine TSEs without digestion).

Application: as capturing or detecting antibody in prion research on biological samples, body fluids, cells, tissue sections and homogenates. For use in Western blot, IHC, ELISA, RIA, FACS, immunoprecipitation, dot-blot, PET-blot.

Contact :

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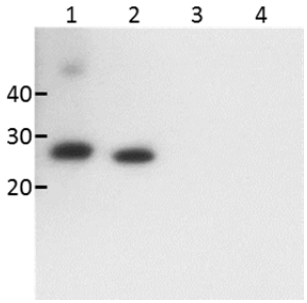
Examples:

Western blot:

PVDF membrane incubated with 5µg/ml primary antibody; secundary antibody rabbit anti-mouse Ig alkaline phosphatase; CDP-Star substrate.

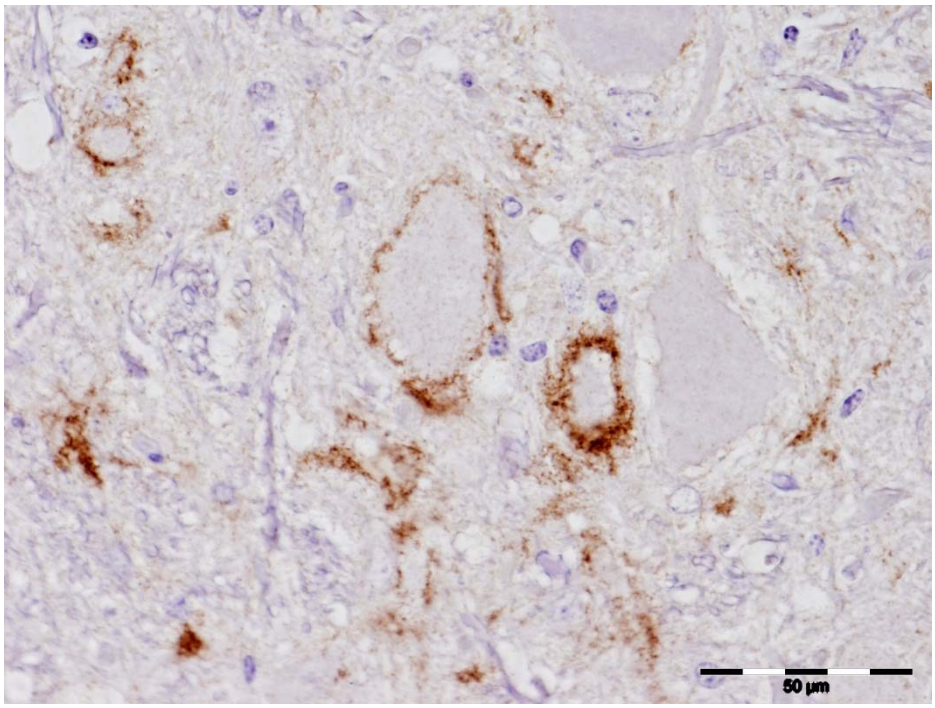


lane	sample	digestion	Amount*	Signal**
1	recombinant E.Coli bovine wt PrP25-242 (6-octarepeats)	No	5ng	++
2	recombinant E.Coli ovine wt PrP25-234 (ARQ)	No	5ng	++
3	classical scrapie ovine brain stem	+PK	0.02mgTE	-
4	C-type BSE in bovine brain stem	+PK	0.1mgTE	-
5	H-type BSE in bovine brain stem	+PK	0.25mgTE	-
6	CWD in North-American elk brain	+PK	0.5mgTE	-
7	301V in VM murine brain	+PK	0.02mgTE	-
8	ME7 in RIII murine brain	+PK	0.02mgTE	-

*TE= tissue equivalents **See also our sheet with our different PrP-specific antibodies

Immunohistochemistry:

Natural classical scrapie infected ovine brain stem with 5µg/ml primary antibody. Bar length is 50 µm. Formalin fixed tissues are routinely dehydrated and processed into paraffin. Tissue sections (4 µm) are mounted on silane coated slides and dried. The sections are deparaffinized in xylene and decreasing gradients of ethanol while the endogenous peroxidase activity is abolished with hydrogen peroxide in methanol. Pretreatment of tissue sections consists of 30 minutes immersion in formic acid followed by 5 minutes autoclaving in citrate solution pH6. After incubation with primary antibody the development takes place with EnVision-PO and DAB, followed by HE staining.



Research Use Only: This product is for Research Use Only and must not be used for diagnostic , therapeutic or manufacturing purposes.

Health, Safety and Waste:

All users of this product must ensure that:

(i) This product's specification is safe for their intended use
(ii) The product is handled in a safe manner using good laboratory practice and in accordance with any relevant local or national regulations pertaining to the use of such products; and
(iii) Any waste originating from the product or its use is disposed of in accordance with any relevant local or national regulations.

References:

First report:
Thuring CMA, van Keulen LJM, Langeveld JPM, Vromans MEW, van Zijderveld FG, and Sweeney T. Immunohistochemical differentiation of (pre)-clinical BSE and scrapie infection in sheep. J Comp Pathol. 2005, 132:59-69.
Other literature:
- Rigter A, Langeveld JPM, Timmer-Parohi D, Bossers A. Mapping of possible prion protein self interaction domains using peptide arrays. BMC Biochemistry 2007, 8:6.

Animal for immunization:
$PrP^{0/0}$ mice, knock-out for PrP
Büeler H, Fischer M, Lang Y, Bluethmann H, Lipp HP, DeArmond SJ, Prusiner SB, Aguet M, Weissmann C. Normal development and behaviour of mice lacking the neuronal cell-surface PrP protein. Nature. 1992 Apr 16;356(6370):577-82.

Contact :

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