

# anti-Prion, Biotin

<b>Art.no</b>	RDI-M1840cIb \$450.00
<b>Clone</b>	1E4  This clone was derived from hybridization of SP2/0-Ag14 myeloma cells with spleen cells of a Prnp <sup>0/0</sup> mouse immunized with the peptide GQWNKPSKPKTN#(corresponding to the bovine PrP AA sequence 108-119; # = amidated carboxy-terminus).
<b>Isotype</b>	IgG1 K
<b>Source</b>	Culture supernatant
<b>Purification</b>	Protein A affinity chromatography
<b>Conjugation</b>	The monoclonal antibodies were conjugated to biotin using a modification of the procedure according to Hnatowich.
<b>Packing</b>	Each vial contains 250 µl (conc. 0.5 mg/ml) in 20 mM TRIS, 150 mM NaCl and 1% BSA.
<b>Preservative</b>	Merthiolate (0.001%)
<b>Storage and stability</b>	Storage at -18° C to -32° C is recommended. Do not freeze and thaw more than three times. The reagent is guaranteed to remain stable until the expiry date stated on the vial label.
<b>Major reactivity</b>	Monoclonal antibody 1E4 was isolated from hybridoma's generated from spleen cells of a Prnp <sup>0/0</sup> mouse, immunized with peptide GQWNKPSKPKTN# (corresponding to the bovine PrP aminoacid sequence 108-119; # = amidated carboxy-terminus) coupled to KLH at its N-terminal end via a CG-AA linker. The clone was selected due to its specific binding behaviour; on Western blot a strong binding reaction was found to BSE brain homogenates digested with Proteinase K. This was in contrast with a weak binding to undigested BSE brain homogenates, suggesting that 1E4 has a higher affinity for Proteinase K cleaved PrP <sup>27-30</sup> than for the non-cleaved PrP <sup>Sc</sup> . Furthermore the Western blot also revealed a weak binding onto non-digested brain homogenate from a normal cow. This is in contrast with other commercially available antibodies, most of which express a similar affinity for both PrP conformers and cleaved PrP <sup>27-30</sup> . Beside BSE infected cattle, MAb 1E4 also reacted with prions from mouse adapted BSE (301V)-infected mice, scrapie-infected sheep, scrapie infected hamster (263K), CWD infected deer, sCJD- and vCJD-infected human on Western blots. However the striking difference between the affinity for cleaved and non-cleaved PrP <sup>Sc</sup> observed for BSE in cattle is not observed in these samples.
<b>Molecular mass</b>	The molecular weight of both PrP <sup>C</sup> and PrP <sup>Sc</sup> is 30-35 kD; after digestion with protease, PrP <sup>Sc</sup> becomes PrP <sup>27-30</sup> (27-30 kD).
<b>Application</b>	Prion research on biological samples, body fluids, cells, tissue sections and homogenates, capturing or detecting antibody in immunoassays
<b>Methods</b>	Western blot, RIA, ELISA, EliBlot, FACS, immunohistochemistry.