

Datasheet: MCA2460

Description:	MOUSE ANTI SHEEP CD230 (PrPSc)
Specificity:	CD230 (PrPSc)
Other names:	PRION PROTEIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	2G11
Isotype:	IgG2a
Quantity:	0.25 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			■	
Immunohistology - Frozen			■	
Immunohistology - Paraffin (1)	■			
ELISA	■			1/50 - 1/1000
Immunoprecipitation			■	
Western Blotting			■	

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1) **Treatment of tissue sections in 98% formic acid, for 30 minutes, is recommended prior to pre-treatment with trypsin at 37°C for 5 minutes followed by heat mediated retrieval with 10mM citrate buffer pH6.0 See [Andreoletti 2000](#).**

Target Species	Sheep
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml

Immunogen	Synthetic peptide 146-R ¹⁵⁴ R ¹⁷¹ -182 of ovine PrP.
External Database Links	UniProt: P23907 Related reagents Entrez Gene: 493887 PRNP Related reagents
Synonyms	PRP, SIP
Specificity	Mouse anti Sheep CD230 (Prpsc) antibody, clone 2G11 recognizes the prion disease form of prion protein known as CD230. Transmissible spongiform encephalopathies (TSEs) or prion diseases are fatal infectious neurodegenerative diseases of humans and animals. These diseases are biologically unique, as they are believed by some to be transmitted by an infectious agent comprised only of protein, with no nucleic acid component. Clinically, these diseases present with motor disturbances and behavioural changes. The major pathological changes seen are neuronal loss, vacuolation (spongiform change), proliferation and branching of glial cells, astrocytic proliferation and accumulation of the prion protein PrP^{Sc}, which can form amyloid plaques. CD230, also known as the prion protein (PrP) exists in two alternate forms; a normal cellular form (PrP^C) and a disease-associated form (PrP^{Sc}). The normal and pathological forms of the prion protein have identical amino acid sequences and differ only in their folded tertiary structure and biochemical properties. MCA2460 is specific for PrP^{Sc}. This clone does not appear to immunostain the normal cellular PrP expressed in healthy sheep tissue sections resulting in specific labelling of ovine PrP^{Sc}. This antibody was raised against a synthetic peptide (146-R¹⁵⁴R¹⁷¹-182) of the ovine PrP peptide and specifically recognises the R¹⁵¹-R¹⁵⁹ sequence.
ELISA	Tested on peptide.
References	- Andréoletti, O. <i>et al.</i> (2000) Early accumulation of PrP(Sc) in gut-associated lymphoid and nervous tissues of susceptible sheep from a Romanov flock with natural scrapie. J Gen Virol. 81 (Pt 12): 3115-26. - Andréoletti, O. <i>et al.</i> (2002) Phenotyping of protein-prion (PrPsc)-accumulating cells in lymphoid and neural tissues of naturally scrapie-affected sheep by double-labeling immunohistochemistry. J Histochem Cytochem. 50 (10): 1357-70. - Ortiz-Pelaez, A. <i>et al.</i> (2015) Allelic variants at codon 146 in the PRNP gene show significant differences in the risk for natural scrapie in Cypriot goats. Epidemiol Infect. 143 (6): 1304-10. - Simmons, M.M. <i>et al.</i> (2015) Phenotype shift from atypical scrapie to CH1641 following experimental transmission in sheep. PLoS One. 10 (2): e0117063. - Borner, R. <i>et al.</i> (2011) Early behavioral changes and quantitative analysis of neuropathological features in murine prion disease: stereological analysis in the albino Swiss mice model. Prion. 5 (3): 215-27.
Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life	18 months from date of despatch.

Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Human Anti Mouse IgG2a (HCA037...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , HRP

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