

## Datasheet: MCA2460

Description:	MOUSE ANTI SHEEP CD230 (aa151 - aa159)
Specificity:	CD230 (aa151 - aa159)
Other names:	PRION PROTEIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	2G11
Isotype:	lgG2a
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 <u>www.bio-rad-antibodies.com/protocols</u>.

		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 u	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 ow system using appropriate negative/positive controls.			for use in their own		
				utes is recommended		
		(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 Se			See <u>Andreoletti 2000</u> .			
Target Species	Sheep					
Product Form	Purified IgG - liquid					
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant					
Buffer Solution	Phosphate buffered salin	e				

Preservative Stabilisers	0.09% Sodium Azide			
Carrier Free	Yes			
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml			
Immunogen	Synthetic peptide 146-R <sup>154</sup> R <sup>171</sup> -182 of ovine PrP.			
External Database Links	UniProt: <u>P23907</u> <u>Related reagents</u> Entrez Gene: <u>493887</u> PRNP <u>Related reagents</u>			
Synonyms	PRP, SIP			
RRID	AB_808711			
Specificity	<ul> <li>Mouse anti Sheep CD230 (aa151 - aa159) antibody, clone 2G11 recognizes CD230 and can be used to detect the plaques which are formed during the progression of prion disease. 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<sup>Sc</sup>, which can form amyloid plaques.</li> <li>CD230. also known as the prion protein (PrP) exists in two alternate forms; a normal cellular form (PrP<sup>c</sup>) and a disease-associated form (PrP<sup>Sc</sup>). 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.</li> <li>MCA2460 was raised against a synthetic peptide (146-R<sup>154</sup>R<sup>171</sup>-182 ) of the ovine PrP peptide and specifically recognises the R<sup>151</sup>-R<sup>159</sup> sequence.</li> </ul>			
ELISA	Tested on peptide.			
References	<ol> <li>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 <u>Gen Virol. 81 (Pt 12): 3115-26.</u></li> <li>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.</li> <li>Borner, R. <i>et al.</i> (2011) Early behavioral changes and quantitative analysis of</li> </ol>			

	<ul> <li>neuropathological features in murine prion disease: stereologic Swiss mice model. <u>Prion. 5 (3): 215-27.</u></li> <li>4. Ortiz-Pelaez, A. <i>et al.</i> (2015) Allelic variants at codon 146 in significant differences in the risk for natural scrapie in Cypriot g (6): 1304-10.</li> <li>5. Simmons, M.M. <i>et al.</i> (2015) Phenotype shift from atypical s experimental transmission in sheep. <u>PLoS One. 10 (2): e0117(</u></li> </ul>	the PRNP gene show goats. <u>Epidemiol Infect. 143</u> crapie to CH1641 following		
Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C. Avoid repeated freezing and thawing as this may denature the antibody. Storage in			
	frost-free freezers is not recommended.			
Guarantee	12 months from date of despatch			
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2460 10040			
Regulatory	For research purposes only			

# **Related Products**

### **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12)       RPE         Goat Anti Mouse IgG IgA IgM (STAR87)       Alk. Phos., HRP         Goat Anti Mouse IgG (STAR76)       RPE
Goat Anti Mouse IgG (STAR76) RPE
Rabbit Anti Mouse IgG (STAR13) <u>HRP</u>
Goat Anti Mouse IgG (STAR70) FITC
Goat Anti Mouse IgG (H/L) (STAR117) <u>Alk. Phos., DyLight®488</u> , DyLight®550,
DyLight®650, DyLight®680, DyLight®800,
FITC, HRP
Rabbit Anti Mouse IgG (STAR9) <u>FITC</u>
Goat Anti Mouse IgG (Fc) (STAR120) <u>FITC</u> , <u>HRP</u>

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M421892:230807'

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