

Datasheet: MCA2595

Description:	MOUSE ANTI SUPEROXIDE DISMUTASE (Cu-Zn)
Specificity:	SUPEROXIDE DISMUTASE (Cu-Zn)
Other names:	SOD
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	2F5
Isotype:	IgG1
Quantity:	0.1 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	■			
ELISA	■			
Immunoprecipitation			■	
Western Blotting			■	

Where this product 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 product for use in their own system using appropriate negative/positive controls.

Target Species	Bovine
Species Cross Reactivity	<p>Reacts with: Human, Mouse</p> <p>N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p>
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	0.1% Sodium Azide (NaN ₃) 0.1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Superoxide dismutase enzyme prepared from bovine erythrocytes.
External Database Links	UniProt: P00442 Related reagents Entrez Gene: 281495 SOD1 Related reagents
RRID	AB_808750
Fusion Partners	Cells from immunised mice were fused with cells of the mouse Sp-2/0-Ag14 myeloma cell line.
Specificity	<p>Mouse anti Bovine superoxide dismutase (Cu/Zn) antibody, clone 2F5 recognizes bovine superoxide dismutase (Cu/Zn), also known by it's gene name SOD1. Bovine superoxide dismutase (Cu/Zn) is a 152 amino acid ~15kDa cytoplasmic protein involved in the removal of free radicals from the cytosol. Superoxide dismutases are a class of enzymes that catalyze the dismutation of superoxide into oxygen and hydrogen peroxide. As such, they are an important antioxidant defense in nearly all cells exposed to oxygen. There are three major families of superoxide dismutase, depending on the metal cofactor: Cu-Zn (which binds both copper and zinc), Fe and Mn types (which bind either iron or manganese), and finally the Ni type, which binds nickel.</p> <p>Mouse anti Bovine superoxide dismutase (Cu/Zn) antibody, clone 2F5 does not cross react with immunoglobulins but does react weakly with Mn SOD.</p>
Immunohistology	This product does not require pre-treatment of paraffin embedded sections e.g. trypsin or pronase prior to staining. This product does not require antigen retrieval using heat treatment methods prior to staining of paraffin sections.
Histology Positive Control Tissue	Human spleen and lymph node.
References	1. Paździor-Czapula, K. <i>et al.</i> (2014) Immunohistochemical evaluation of superoxide dismutase (Cu/Zn SOD) concentrations in erythrocytes of dairy cattle and farm-raised deer by a computer-assisted analysis of microscopic images. Pol J Vet Sci. 17: 275-9.
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 #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2595 10041
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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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](https://www.bio-rad-antibodies.com/datasheets)
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