

Datasheet: 8474-9510

Description:	SHEEP ANTI BOVINE SUPEROXIDE DISMUTASE (Cu-Zn)
Specificity:	SUPEROXIDE DISMUTASE (Cu-Zn)
Other names:	SOD
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	1 ml

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
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			1/500 - 1/4000
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 the appropriate negative/positive controls.

Target Species	Bovine
Product Form	Purified IgG- liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 5.0 mg/ml
Immunogen	Native superoxide dismutase from bovine erythrocytes.

**External Database
Links**

UniProt:

[P00442](#) [Related reagents](#)

Entrez Gene:

[281495](#) SOD1 [Related reagents](#)

RRID AB_2191640

Specificity

Sheep anti Bovine superoxide dismutase antibody recognizes bovine superoxide dismutase. Superoxide dismutases (SOD) 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.

Sheep anti Bovine superoxide dismutase antibody recognizes superoxide dismutase (Cu-Zn) and has the following specificities as determined by ELISA at 50% maximal binding:

SOD, bovine RBCs (Cu-Zn)	100%
SOD, human RBCs (Cu-Zn)	30%
SOD, bovine liver (Mn)	14%
SOD, E. coli (Fe)	14%
SOD, E. coli (Mn)	14%

References

1. Yang, L.Y. *et al.* (2005) Differential expression of antioxidant enzymes in various hepatocellular carcinoma cell lines. [J Cell Biochem. 96: 622-31.](#)
2. Nowicki, M. *et al.* (2007) Peptidergic and nitrergic innervation of the pineal gland in the domestic pig: an immunohistochemical study. [Anat Histol Embryol. 36: 311-20.](#)
3. Kankofer, M. *et al.* (2013) The presence of SOD 1 and GSH-Px in bovine retained and properly released foetal membranes. [Reprod Domest Anim. 48 \(4\): 699-704.](#)

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.

Guarantee

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

Rabbit Anti Sheep IgG (H/L) (5184-2304...) [Biotin](#)

Donkey Anti Sheep IgG (STAR88...) [DyLight®488](#), [HRP](#)

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