



Anti-SOD1 monoclonal antibody, clone 2F5 (CABT-54815MS)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview

Mouse anti Bovine superoxide dismutase (Cu/Zn) antibody, clone 2F5 recognizes bovine superoxide dismutase (Cu/Zn), also known by its 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. Mouse anti Bovine superoxide dismutase (Cu/Zn) antibody, clone 2F5 does not cross react with immunoglobulins but does react weakly with Mn SOD. 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.

Specificity	SOD1
Immunogen	Superoxide dismutase enzyme prepared from bovine erythrocytes.
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Bovine, Human, Mouse
Clone	2F5
Conjugate	Unconjugated
Applications	IHC-Fr; ELISA; IHC-P

Format	Purified IgG - liquid
Size	100 µg
Preservative	0.1% Sodium Azide
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.

GENE INFORMATION

Gene Name	SOD1 superoxide dismutase 1, soluble [Bos taurus (cattle)]
Official Symbol	SOD1
Synonyms	SOD1; SOD1L1; superoxide dismutase [Cu-Zn]; Cu-Zn superoxide dismutase;
Entrez Gene ID	281495
Protein Refseq	NP_777040
UniProt ID	P00442
Chromosome Location	1q12-q14
Pathway	Amyotrophic lateral sclerosis (ALS); Cellular responses to stress; Detoxification of Reactive Oxygen Species; Hemostasis; Huntingtons disease; Peroxisome; Platelet activation, signaling and aggregation; Platelet degranulation;
Function	chaperone binding; copper ion binding; protein binding; protein phosphatase 2B binding; superoxide dismutase activity; ubiquitin-protein transferase activity; zinc ion binding;