

## Product datasheet for **AM01230PU-N**

### Superoxide Dismutase 1 (SOD1) Mouse Monoclonal Antibody [Clone ID: 2F5]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	2F5
Applications:	ELISA, IHC
Recommended Dilution:	<b>ELISA.</b> <b>Immunohistochemistry on Frozen Sections.</b> <b>Immunohistochemistry on Paraffin Sections:</b> 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. <i>Recommended Positive Control:</i> Human spleen and lymph node.
Reactivity:	Bovine, Human, Mouse
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Superoxide dismutase enzyme prepared from bovine erythrocytes. Cells from immunised mice were fused with cells of the mouse Sp-2/0-Ag14 myeloma cell line.
Specificity:	This antibody recognizes Copper/Zinc Superoxide Dismutase (SOD). It does not cross react with immunoglobulins but does react weakly with Mn SOD.
Formulation:	PBS containing 0.09% Sodium Azide as preservative and 0.1% BSA as stabilizer State: Purified State: Liquid purified IgG fraction
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein G
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	superoxide dismutase 1, soluble



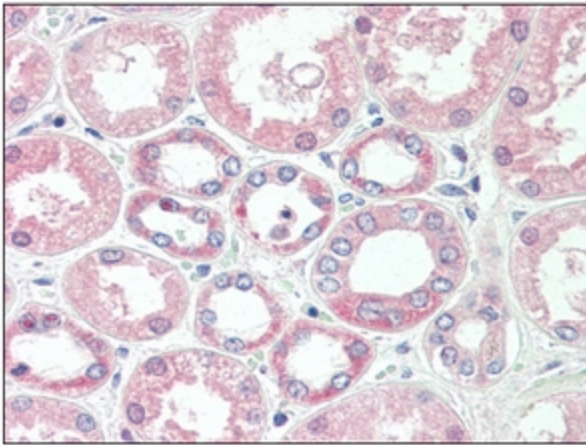
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Database Link: [Entrez Gene 6647 Human P00441](#)

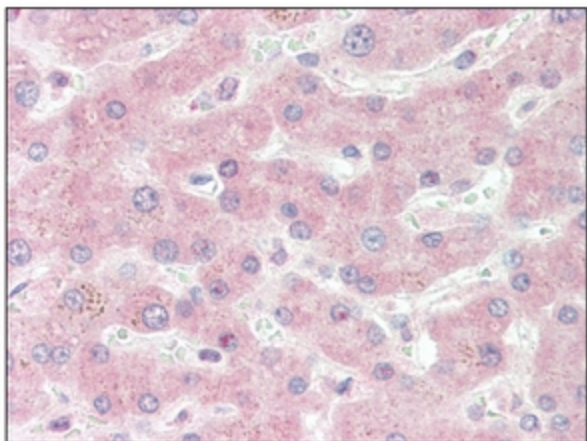
**Background:** Superoxide dismutases are ubiquitous metalloproteins that destroy oxygen-mediated free radicals, that are normally produced within the cells, which are toxic to biological systems. There are three forms of superoxide dismutase, including the Fe, mitochondrial (Mn) and the copper/zinc binding (Cu/Zn) form. The Cu/Zn form of SOD is utilised by most eukaryotic organisms. SOD Cu/Zn prevents oxygen-mediated free radical damage by catalysing the dismutation of the toxic superoxide radical to molecular oxygen and hydrogen peroxide. Superoxide dismutases catalyzes the conversion of single electron reduced species of molecular oxygen to hydrogen peroxide and oxygen. Cu, Zn superoxide dismutase (SOD1) is widely distributed and comprises 90% of total SOD. Mutations in SOD1 cause a form of familial ALS. Oxidative modifications and aggregation of SOD1 has been associated with Alzheimer's and Parkinson's disease.

**Synonyms:** SOD-1, CuZn-SOD, CuZnSOD, IPOA, ALS1

**Product images:**



Immunohistochemistry: SOD1 antibody staining of Formalin-Fixed, Paraffin-Embedded Human Kidney at 15 ug/ml followed by biotinylated anti-mouse IgG secondary antibody, alkaline phosphatase-streptavidin and chromogen.



Immunohistochemistry: SOD1 antibody staining of Formalin-Fixed, Paraffin-Embedded Human Liver at 15 ug/ml followed by biotinylated anti-mouse IgG secondary antibody, alkaline phosphatase-streptavidin and chromogen.