



## Mouse Anti-Human SOD1 monoclonal antibody, clone NN21 (CABT-ZB548)

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

### PRODUCT INFORMATION

<b>Specificity</b>	It reacts with Human SOD1
<b>Target</b>	SOD1
<b>Immunogen</b>	Recombinant Human SOD1 Protein
<b>Isotype</b>	IgG
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Clone</b>	NN21
<b>Purification</b>	Protein A purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	ELISA(cap) This antibody will detect SOD1 in antibody pair set. [ABPR-ZB124]
<b>Preparation</b>	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human SOD1. The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
<b>Format</b>	Purified, Liquid
<b>Concentration</b>	Lot specific
<b>Size</b>	50 µL, 100 µL, 200 µL, 1 mL

<b>Buffer</b>	PBS
<b>Preservative</b>	None
<b>Storage</b>	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
<b>Ship</b>	Wet ice

## BACKGROUND

**Introduction** SOD1 belongs to the Cu-Zn superoxide dismutase family. It binds copper and zinc ions and is one of two isozymes responsible for destroying free superoxide radicals in the body. The encoded isozyme is a soluble cytoplasmic protein, acting as a homodimer to convert naturally-occurring but harmful superoxide radicals to molecular oxygen and hydrogen peroxide. The other isozyme is a mitochondrial protein. Mutations in this gene have been implicated as causes of familial amyotrophic lateral sclerosis. Rare transcript variants have been reported for this gene. SOD1 destroys radicals which are normally produced within the cells and which are toxic to biological systems. Defects in SOD1 are the cause of amyotrophic lateral sclerosis type 1 (ALS1). ALS1 is a familial form of amyotrophic lateral sclerosis, a neurodegenerative disorder affecting upper and lower motor neurons and resulting in fatal paralysis. Sensory abnormalities are absent. Death usually occurs within 2 to 5 years. The etiology of amyotrophic lateral sclerosis is likely to be multifactorial, involving both genetic and environmental factors. The disease is inherited in 5-10% of cases leading to familial forms.

**Keywords** SOD1; superoxide dismutase 1; soluble; ALS

## GENE INFORMATION

**Synonyms** SOD1; superoxide dismutase 1; soluble; ALS; SOD; ALS1; IPOA; hSod1; HEL-S-44; homodimer; superoxide dismutase [Cu-Zn]; SOD; soluble; indophenoloxidase A; Cu/Zn superoxide dismutase; superoxide dismutase; cystolic; epididymis secretory protein Li 44; anti-SOD1

**Entrez Gene ID** [6647](#)

**UniProt ID** [P00441](#)