

Stressgen

Cu/Zn SOD Polyclonal Antibody

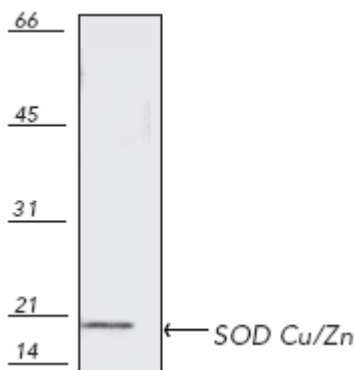
Product Specifications	
Catalog Number:	SOD-101
Host:	Rabbit
Species Reactivity:	Mouse, rat and human
Applications: <i>The optimal dilution for a specific application must be determined by the investigator</i>	WB: 0.5 µg/mL <i>Recommended for use with samples of mouse or rat origin. Recommend using ADI's SOD-100 for use with human samples.</i>
Predicted m.w.:	~23 kDa (human) ~19 kDa (other species)
Concentration:	See product label
Purification:	Protein A Affinity
Format:	PBS, pH 7.2, 0.09% azide, 50% glycerol
Storage: <i>Shipping conditions may differ from the recommended storage temperature</i>	Store at -20°C
Immunogen:	Native rat Cu/Zn SOD protein ²
Related Products:	
LYT-RB100	Rat Brain Tissue Extract
LYT-MB100	Mouse Brain Tissue Extract
SAB-101	Goat IgG Polyclonal Antibody, AP Conjugate
SOD-100	Cu/Zn SOD Polyclonal Antibody
SOD-110	Mn SOD Polyclonal Antibody
SOD-111	Mn SOD Polyclonal Antibody

Background:

Superoxide dismutase (SOD) is responsible for the elimination of cytotoxic active oxygen by catalyzing the dismutation of the superoxide radical to oxygen and hydrogen peroxide^{1,2}. There are three SOD isoenzymes in mammalian cells: extracellular SOD (EC SOD, SOD-3); copper and zinc-containing SOD (Cu/Zn SOD, SOD-1); and manganese-containing SOD (Mn SOD, SOD-2). The Cu/Zn form binds Cu and Zn ions and exists as a soluble 32 kDa homodimer in the cytosol. Mutations in the SOD-1 gene account for approximately 20% of amyotrophic lateral sclerosis (ALS) or 'Lou Gehrig disease,' a neurodegenerative disorder characterized by the death of motor neurons in the brain, brainstem, and spinal cord that results in fatal paralysis^{3,4}.

References:

1. Kurobe, N. and Kato, K. (1991) *Biom Res.* **12**, 97-103.
2. Kurobe, N., *et al.* (1990) *Clin Chim Acta* **192**, 171-180.
3. Deng, H.-X., *et al.* (1993) *Science* **261**, 1047-1051.
4. Rosen, D.R., *et al.* (1993) *Nature* **362**, 59-62.



Western blot analysis of rat brain tissue extract, probed with Cu/Zn SOD Polyclonal Antibody