

EC SOD Polyclonal Antibody

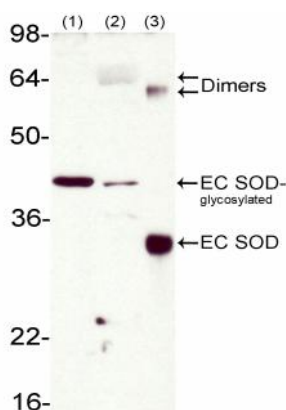
Product Specifications	
Catalog Number:	SOD-106
Host:	Rabbit
Species Reactivity:	Human, mouse, and rat
Applications: <i>The optimal dilution for a specific application must be determined by the investigator</i>	WB: 1:1000
Predicted m.w.:	~35-40 kDa glycosylation dependant (Incomplete reduction of EC SOD tetramer is common, resulting in the appearance of multimeric immunoreactive bands.)
Concentration:	See product label
Purification:	Protein A Affinity
Format:	PBS, pH 7.2, 50% glycerol, 0.09% sodium azide
Storage: <i>Shipping conditions may differ from the recommended storage temperature</i>	Store at -20°C
Immunogen:	Synthetic peptide derived from the sequence of EC SOD; sequence identical in human, mouse, rat and rabbit
Related Products:	
SOD-100	Cu/Zn SOD Polyclonal Antibody
SOD-101	Cu/Zn SOD Polyclonal Antibody
SOD-110	Mn SOD Polyclonal Antibody
SOD-111	Mn SOD Polyclonal Antibody
SAB-300	Goat anti-Rabbit IgG PAb, HRP Conjugate
900-157	Superoxide Dismutase Activity Kit

Background:

Superoxide dismutase (SOD) eliminates cytotoxic active oxygen by catalyzing the dismutation of the superoxide radical to oxygen and hydrogen peroxide^{1,2}. Three SOD isoenzymes exist in mammalian cells: extracellular SOD (EC SOD, SOD-3), copper and zinc-containing SOD (CuZn SOD, SOD-1), and manganese-containing SOD (Mn SOD, SOD-2)³. EC SOD is a 135kDa homotetramer of two dimers, each held together by one disulfide bond that links the C-terminal heparin binding domains⁴. Heparin binding affinity is modulated by proteolysis of the heparin binding domain, and may help regulate the distribution of EC SOD in various tissues. EC SOD resides primarily in the extracellular matrix of tissues, and to a lesser extent in extracellular fluids⁵.

References:

1. Kurobe, N. and Kato, K. (1991) Biomed Res. **12**, 97-103.
2. Kurobe, N., et al. (1990) Clinica Chimica Acta **192**, 171-180.
3. Wong, G.H., et al. (1989) Cell **58**, 923-931.
4. Oury, T.D., et al. (1996) Biochem J. **317**, 51-57.
5. Fattman, C. et al. (2001) Free Rad Biol Med. **31**, 1198-1207.



Western blot analysis of rat lung tissue extract (1), mouse lung tissue extract (2), and human EC SOD probed with EC SOD Polyclonal Antibody