

Product datasheet for TA326420

Superoxide Dismutase 3 (SOD3) Mouse Monoclonal Antibody [Clone ID: 4GG11G6]

Product data:

Product Type:	Primary Antibodies
Clone Name:	4GG11G6
Applications:	IF
Recommend Dilution:	WB: 1:1000, IHC: 1:100, ICC: 1:100
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1, kappa
Clonality:	Monoclonal
Immunogen:	Human EC SOD purified from aortas
Formulation:	PBS pH7.4, 50% glycerol, 0.09% sodium azide
Concentration:	1 mg/ml
Purification:	Protein G Purified
Gene Name:	superoxide dismutase 3, extracellular
Database Link:	NP_003093 Entrez Gene 20657 MouseEntrez Gene 25352 RatEntrez Gene 6649 Human
Background:	Superoxide dismutase (SOD) is an endogenously produced intracellular enzyme present in almost every cell in the body . It works by catalyzing the dismutation of the superoxide radical O ₂ ⁻ to O ₂ and H ₂ O ₂ , which are then metabolized to H ₂ O and O ₂ by catalase and glutathione peroxidase . In general, SODs play a major role in antioxidant defense mechanisms . There are three types of SOD in mammalian cells. One form (SOD1) contains Cu and Zn ions as a homodimer and exists in the cytoplasm. The two subunits of 16 kDa each are linked by two cysteines forming an intra-subunit disulphide bridge . The second form (SOD2) is a manganese containing enzyme and resides in the mitochondrial matrix. It is a homotetramer of 80 kDa. The third form (SOD3 or EC-SOD) is like SOD1 in that it contains Cu and Zn ions, however it is distinct in that it is a homotetramer, with a mass of 30 kDa and it exists only in the extra-cellular space . SOD3 can also be distinguished by its heparin-binding capacity .
Synonyms:	EC-SOD
Note:	Detects EC SOD at ~35kDa.
Protein Families:	Druggable Genome, Secreted Protein



[View online »](#)

Product images:



ICC staining of human cartilage samples using the antibody