

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
Recommended Dilution:	WB: 1:1000, IHC: 1:100, ICC: 1:100
Reactivity:	Human, Rat, Mouse
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:	lot specific
Purification:	Protein G Purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	superoxide dismutase 3, extracellular
Database Link:	NP_003093 Entrez Gene 20657 Mouse Entrez Gene 25352 Rat Entrez Gene 6649 Human P08294



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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_2O_2 , which are then metabolized to H_2O 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

Product images:


ICC staining of human cartilage samples using the antibody