

Product datasheet for TA326420

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

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 MouseEntrez Gene 25352 RatEntrez Gene 6649 Human

P08294





Background:

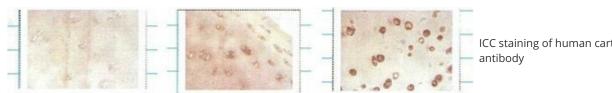
Superoxide dismutase (SOD) is an endogenously produced intracellular enzyme present in almost every cell in the body . It works by catalyzing the dismutation of the superoxide radical O2? to O2 and H2O2, which are then metabolized to H2O and O2 by catalase and glutathione peroxidase. In general, SODs 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**

Detects EC SOD at ~35kDa. Note:

Protein Families: Druggable Genome, Secreted Protein

Product images:



ICC staining of human cartilage samples using the