



Human SOD3 peptide (DAG-P1219)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

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| Antigen Description | This gene encodes a member of the superoxide dismutase (SOD) protein family. SODs are antioxidant enzymes that catalyze the dismutation of two superoxide radicals into hydrogen peroxide and oxygen. The product of this gene is thought to protect the brain, lungs, and other tissues from oxidative stress. The protein is secreted into the extracellular space and forms a glycosylated homotetramer that is anchored to the extracellular matrix (ECM) and cell surfaces through an interaction with heparan sulfate proteoglycan and collagen. A fraction of the protein is cleaved near the C-terminus before secretion to generate circulating tetramers that do not interact with the ECM. [provided by RefSeq, Jul 2008] |
| Specificity | Expressed in blood vessels, heart, lung, kidney and placenta. Major SOD isoenzyme in extracellular fluids such as plasma, lymph and synovial fluid. |
| Purity | 70 - 90% by HPLC. |
| Conjugate | Unconjugated |
| Sequence Similarities | Belongs to the Cu-Zn superoxide dismutase family. |
| Format | Liquid |
| Preservative | None |
| Storage | Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request. |

GENE INFORMATION

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| Gene Name | SOD3 superoxide dismutase 3, extracellular [Homo sapiens (human)] |
| Official Symbol | SOD3 |

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| Synonyms | SOD3; superoxide dismutase 3, extracellular; EC-SOD; extracellular superoxide dismutase [Cu-Zn]; |
| Entrez Gene ID | 6649 |
| mRNA Refseq | NM_003102.2 |
| Protein Refseq | NP_003093.2 |
| UniProt ID | P08294 |
| Chromosome Location | 4p15.2 |
| Pathway | Cellular responses to stress, organism-specific biosystem; Detoxification of Reactive Oxygen Species, organism-specific biosystem; Folate Metabolism, organism-specific biosystem; Oxidative Stress, organism-specific biosystem; Selenium Pathway, organism-specific biosystem; Vitamin B12 Metabolism, organism-specific biosystem; superoxide radicals degradation, organism-specific biosystem; |
| Function | copper ion binding; heparin binding; protein binding; superoxide dismutase activity; superoxide dismutase activity; zinc ion binding; |