



# Human SOD1 blocking peptide (DAG-P1196)

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

## PRODUCT INFORMATION

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| <b>Antigen Description</b>   | The protein encoded by this gene binds copper and zinc ions and is one of two isozymes responsible for destroying free superoxide radicals in the body. The encoded isozyme is a soluble cytoplasmic protein, acting as a homodimer to convert naturally-occurring but harmful superoxide radicals to molecular oxygen and hydrogen peroxide. The other isozyme is a mitochondrial protein. Mutations in this gene have been implicated as causes of familial amyotrophic lateral sclerosis. Rare transcript variants have been reported for this gene. [provided by RefSeq, Jul 2008] |
| <b>Conjugate</b>             | Unconjugated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Applications</b>          | BL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Sequence Similarities</b> | Belongs to the Cu-Zn superoxide dismutase family.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Format</b>                | Liquid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Preservative</b>          | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Storage</b>               | 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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| <b>Gene Name</b>       | <a href="#">SOD1 superoxide dismutase 1, soluble [ Homo sapiens (human) ]</a>                                                                                                                                                                           |
| <b>Official Symbol</b> | SOD1                                                                                                                                                                                                                                                    |
| <b>Synonyms</b>        | SOD1; superoxide dismutase 1, soluble; ALS; SOD; ALS1; IPOA; hSod1; HEL-S-44; homodimer; superoxide dismutase [Cu-Zn]; SOD, soluble; indophenoxidase A; Cu/Zn superoxide dismutase; superoxide dismutase, cystolic; epididymis secretory protein Li 44; |

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| <b>Entrez Gene ID</b>      | <a href="#">6647</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>mRNA Refseq</b>         | <a href="#">NM_000454.4</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Protein Refseq</b>      | <a href="#">NP_000445.1</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>UniProt ID</b>          | P00441                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Chromosome Location</b> | 21q22.11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Pathway</b>             | AGE/RAGE pathway, organism-specific biosystem; Amyotrophic lateral sclerosis (ALS), organism-specific biosystem; Amyotrophic lateral sclerosis (ALS), organism-specific biosystem; Amyotrophic lateral sclerosis (ALS), conserved biosystem; Cellular responses to stress, organism-specific biosystem; Detoxification of Reactive Oxygen Species, organism-specific biosystem; Dopamine metabolism, organism-specific biosystem; FOXA1 transcription factor network, organism-specific biosystem; Folate Metabolism |
| <b>Function</b>            | Rac GTPase binding; chaperone binding; copper ion binding; identical protein binding; protein binding; protein homodimerization activity; protein phosphatase 2B binding; superoxide dismutase activity; superoxide dismutase activity; superoxide dismutase ac                                                                                                                                                                                                                                                      |