



Human SOD2 peptide (DAG-P2006)

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

PRODUCT INFORMATION

Antigen Description	This gene is a member of the iron/manganese superoxide dismutase family. It encodes a mitochondrial protein that forms a homotetramer and binds one manganese ion per subunit. This protein binds to the superoxide byproducts of oxidative phosphorylation and converts them to hydrogen peroxide and diatomic oxygen. Mutations in this gene have been associated with idiopathic cardiomyopathy (IDC), premature aging, sporadic motor neuron disease, and cancer. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]
Purity	70 - 90% by HPLC.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the iron/manganese 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

Gene Name	SOD2 superoxide dismutase 2, mitochondrial [Homo sapiens (human)]
Official Symbol	SOD2
Synonyms	SOD2; superoxide dismutase 2, mitochondrial; IPOB; MNSOD; MVCD6; superoxide dismutase [Mn], mitochondrial; indophenoloxidase B; Mn superoxide dismutase; mangano-superoxide dismutase; manganese-containing superoxide dismutase;

Entrez Gene ID	6648
mRNA Refseq	NM_000636.2
Protein Refseq	NP_000627.2
UniProt ID	P04179
Chromosome Location	6q25.3
Pathway	Cellular responses to stress, organism-specific biosystem; DNA damage response (only ATM dependent), organism-specific biosystem; Detoxification of Reactive Oxygen Species, organism-specific biosystem; FoxO family signaling, organism-specific biosystem; FoxO signaling pathway, organism-specific biosystem; Huntingtons disease, organism-specific biosystem; Huntingtons disease, conserved biosystem; Oxidative Stress, organism-specific biosystem; Peroxisome, organism-specific biosystem; Peroxisome, c
Function	DNA binding; identical protein binding; manganese ion binding; manganese ion binding; oxygen binding; superoxide dismutase activity; superoxide dismutase activity;