

Product datasheet for **KN200725LP**

Superoxide Dismutase 1 (SOD1) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control
Donor DNA:	Luciferase-Puro
Symbol:	Superoxide Dismutase 1
Locus ID:	6647
Components:	<p>KN200725G1, Superoxide Dismutase 1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)</p> <p>KN200725G2, Superoxide Dismutase 1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)</p> <p>KN200725LPD, donor DNA containing left and right homologous arms and Luciferase-Puro functional cassette.</p> <p>GE100003, scramble sequence in pCas-Guide vector</p>
RefSeq:	NM_000454
UniProt ID:	P00441
Synonyms:	ALS; ALS1; HEL-S-44; homodimer; hSod1; IPOA; SOD
Summary:	<p>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. In addition, this protein contains an antimicrobial peptide that displays antibacterial, antifungal, and anti-MRSA activity against <i>E. coli</i>, <i>E. faecalis</i>, <i>S. aureus</i>, <i>S. aureus</i> MRSA LPV+, <i>S. agalactiae</i>, and yeast <i>C. krusei</i>. 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 2020]</p>



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Product images:

