

## Recombinant Human KARS, His-tagged

**Cat. No.** KARS-29008TH    **Lot. No.** (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant fragment Human Lysyl tRNA synthetase (amino acids 63-597) with a N terminal His tag. 558 amino acids with a predicted MWt 63.7 kDa including tag.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	535 amino acids
<b>Description</b>	Aminoacyl-tRNA synthetases are a class of enzymes that charge tRNAs with their cognate amino acids. Lysyl-tRNA synthetase is a homodimer localized to the cytoplasm which belongs to the class II family of tRNA synthetases. It has been shown to be a target of autoantibodies in the human autoimmune diseases, polymyositis or dermatomyositis. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.
<b>Conjugation</b>	HIS
<b>Molecular Weight</b>	63.700kDa inclusive of tags
<b>Form</b>	Liquid
<b>Purity</b>	>95% by SDS-PAGE
<b>Storage buffer</b>	pH: 8.00 Constituents: 0.32% Tris HCl, 20% Glycerol, 0.58% Sodium chloride, 0.02%

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

	DTT
<b>Storage</b>	Store at +4°C short term (1-2 weeks). Aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
<b>Sequences of amino acids</b>	<p>MGSSHHHHHSSGLVPRGSHMGSGVGPEEESVDPNQYYKIRSQAIHQLKVNGEDP          YPHKFHVDISLTDFIQKYSHLQPGDHLTDITLKVAGRIHAKRASGGKLIFYDLRGEGVK          LQVMANSRNYKSEEEFIHINNKLRGDIIGVQGNPGKTKKGELSIIPIYEITLLSPCLHM          LPHLHFGLKDKETRYRQRYLDLILNDFVRQKFIIRSKIITYIRSFLDELGFLEIETPMMNII          PGGAVAKPFITYHNELDMNLVMRIAPELYHKMLVVGIDRVYEIGRQFRNEGIDLTHN          PEFTTCEFYMAYADYHDLMEITEKMOVSGMVKHITGSYKVTYHPDGPEGQAYDVDFDFT          PPFRRINMVEELEKALGMKLPETNLFETEETRKILDDICVAKAVECPPRRTTARLLDKL          VGEFLEVTCINPTFICDHPQIMSPKAKWHRKSEGLTERFELFVMKKEICNAYTELNDP          MRQRQLFEEQAKAKAAGDDEAMFIDENFCTALEYGLPPTAGWGMGIDRVAMFLTD          SNNIKEVLLFPAMKPEDKKENVATTDLTLESTTVGTSV</p>
<b>Sequence Similarities</b>	Belongs to the class-II aminoacyl-tRNA synthetase family.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">KARS lysyl-tRNA synthetase [ Homo sapiens ]</a>
<b>Official Symbol</b>	<a href="#">KARS</a>
<b>Synonyms</b>	KARS; lysyl-tRNA synthetase; KARS2; lysine tRNA ligase;
<b>Gene ID</b>	<a href="#">3735</a>
<b>mRNA Refseq</b>	<a href="#">NM_001130089</a>

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Protein Refseq</b>	NP_001123561
<b>MIM</b>	601421
<b>Uniprot ID</b>	Q15046
<b>Chromosome Location</b>	16q23.1
<b>Pathway</b>	Aminoacyl-tRNA biosynthesis, organism-specific biosystem; Aminoacyl-tRNA biosynthesis, conserved biosystem; Aminoacyl-tRNA biosynthesis, eukaryotes, organism-specific biosystem; Aminoacyl-tRNA biosynthesis, eukaryotes, conserved biosystem; Cytosolic tRNA aminoacylation, organism-specific biosystem;
<b>Function</b>	ATP binding; ligase activity; lysine-tRNA ligase activity; lysine-tRNA ligase activity; metal ion binding;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA