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Datasheet for ABIN7318750 KARS Protein (His tag)

Overview

Quantity:	50 µg
Target:	KARS
Origin:	Human
Source:	Human Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This KARS protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human KARS Protein (His Tag)
Sequence:	Ala2-Val597
Characteristics:	Recombinant Human Lysine-tRNA Ligase is produced by our Mammalian expression system and the target gene encoding Ala2-Val597 is expressed with a 6His tag at the C-terminus.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	KARS
Alternative Name:	KARS (KARS Products)
Background:	Background: Lysine-tRNA ligase, also known as Lysyl-tRNA synthetase, LysRS, KARS and KIAA0070, belongs to the class-II aminoacyl-tRNA synthetase family. The N-terminal cytoplasmic domain (1-65) is a functional tRNA-binding domain, which is required for nuclear

Target Details

localization, is involved in the interaction with DARS, but has a repulsive role in the binding to EEF1A1. A central domain (208-259) is involved in homodimerization and is required for interaction with HIV-1 GAG and incorporation into virions. KARS catalyzes the specific attachment of an amino acid to its cognate tRNA in a two step reaction: the amino acid (AA) is first activated by ATP to form AA-AMP and then transferred to the acceptor end of the tRNA. Defects in KARS are the cause of Charcot-Marie-Tooth disease recessive intermediate type B (CMTRIB).

Synonym: Lysine-tRNA Ligase, Lysyl-tRNA Synthetase, LysRS, KARS, KIAA0070

Molecular Weight: 69.1 kDa

UniProt: [Q15046](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Frozen, Liquid

Buffer: Supplied as a 0.2 µm filtered solution of 20 mM TrisHCl, 150 mM NaCl, 1 mM DTT, 20 % glycerol, pH 8.0.

Storage: -20 °C

Storage Comment: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.