

# CARS (Human) Recombinant Protein (Q01)

Catalog # H00000833-Q01 Size 25 ug, 10 ug

## Applications



Specification	
Product Description	Human CARS partial ORF ( NP_001742, 447 a.a 546 a.a.) recombinant protein with GST-tag at N -terminal.
Sequence	NTMESALQYEKFLNEFFLNVKDILRAPVDITGQFEKWGEEEAELNKNFYDKKTAIHKALCDNVDTR TVMEEMRALVSQCNLYMAARKAVRKRPNQALLEN
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	36.74
Interspecies Antigen Sequence	Mouse (89); Rat (90)
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCI, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.



# Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — CARS	
Entrez GenelD	833
GeneBank Accession#	<u>NM_001751</u>
Protein Accession#	<u>NP_001742</u>
Gene Name	CARS
Gene Alias	CARS1, CYSRS, MGC:11246
Gene Description	cysteinyl-tRNA synthetase
Omim ID	<u>123859</u>
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a class 1 aminoacyl-tRNA synthetase, cysteinyl-tRNA synthetase. Each of the twenty aminoacyl-tRNA synthetases catalyzes the aminoacylation of a specific tRNA or tRNA isoa ccepting family with the cognate amino acid. This gene is one of several located near the imprinte d gene domain of 11p15.5, an important tumor-suppressor gene region. Alterations in this region have been associated with the Beckwith-Wiedemann syndrome, Wilms tumor, rhabdomyosarcom a, adrenocortical carcinoma, and lung, ovarian, and breast cancer. Alternative splicing of this gen e results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq
Other Designations	OTTHUMP00000012605 cysteine tRNA ligase 1, cytoplasmic cysteine translase cysteine-tRNA li gase

## Pathway

<u>Aminoacyl-tRNA biosynthesis</u>



#### Disease

- Diabetes Mellitus
- Diabetic Nephropathies
- Genetic Predisposition to Disease
- Kidney Failure
- Proteinuria