

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