

## Product datasheet for **TA345738**

### CARS1 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB, IHC
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The immunogen for anti-CARS antibody: synthetic peptide directed towards the N terminal of human CARS. Synthetic peptide located within the following region: MQTPPLQQPHQEYVFLAFLVIVIPSFLTKEVFIPQDGKKVTWYCCGPTVY
Formulation:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. <i>Note that this product is shipped as lyophilized powder to China customers.</i>
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	81 kDa
Gene Name:	cysteinyI-tRNA synthetase
Database Link:	<a href="#">NP_001014438</a> <a href="#">Entrez Gene 833 Human</a> <a href="#">P49589</a>



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**Background:**

CARS is 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 isoaccepting family with the cognate amino acid. This gene is one of several located near the imprinted 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, rhabdomyosarcoma, adrenocortical carcinoma, and lung, ovarian, and breast cancer. Western blots using two different antibodies against two unique regions of this protein target confirm the same apparent molecular weight in our tests. 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 isoaccepting family with the cognate amino acid. This gene is one of several located near the imprinted 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, rhabdomyosarcoma, adrenocortical carcinoma, and lung, ovarian, and breast cancer. Alternative splicing of this gene results in multiple transcript variants encoding distinct isoforms.

**Synonyms:**

CARS1; CYSRS; cysteine-tRNA ligase; cysteine transase; cysteine tRNA ligase 1; cysteinyl-tRNA synthetase; cytoplasmic; MGC:11246; OTTHUMP00000012605

**Note:**

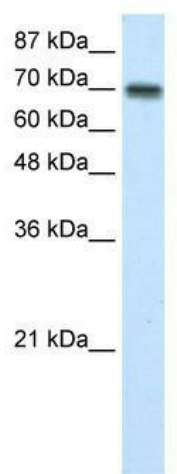
Immunogen Sequence Homology: Rat: 100%; Human: 100%

**Protein Families:**

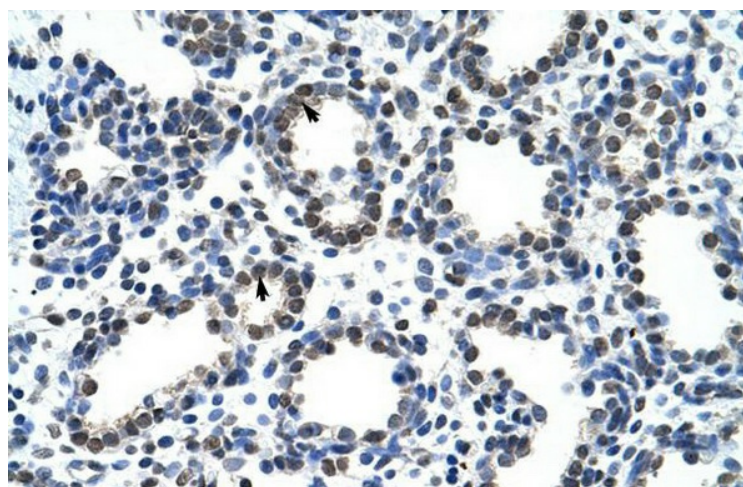
Druggable Genome

**Protein Pathways:**

Aminoacyl-tRNA biosynthesis

**Product images:**

WB Suggested Anti-CARS Antibody Titration: 0.2-1 ug/ml; Positive Control: HepG2 cell lysate



Rabbit Anti-CARS Antibody; Paraffin Embedded Tissue: Human Lung; Cellular Data: Alveolar cells; Antibody Concentration: 4.0-8.0 ug/ml; Magnification: 400X