



# Anti-CARS monoclonal antibody (DCABH-10836)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Antigen Description</b>	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.
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<b>Immunogen</b>	A synthetic peptide of human CARS is used for rabbit immunization.
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human
<b>Purification</b>	Protein A
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	Western Blot (Transfected lysate); ELISA
<b>Buffer</b>	In 1x PBS, pH 7.4
<b>Preservative</b>	None
<b>Storage</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">CARS cysteinyl-tRNA synthetase [ Homo sapiens ]</a>
<b>Official Symbol</b>	CARS
<b>Synonyms</b>	CARS; cysteinyl-tRNA synthetase; cysteine--tRNA ligase, cytoplasmic; CARS1; cysteine tRNA ligase 1; cytoplasmic; cysteine transase; cysteine tRNA ligase 1, cytoplasmic; CYSRS; MGC:11246;
<b>Entrez Gene ID</b>	<a href="#">833</a>
<b>Protein Refseq</b>	<a href="#">NP_001014437</a>
<b>UniProt ID</b>	<a href="#">P49589</a>
<b>Chromosome Location</b>	11p15.5
<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; Gene Expression, organism-specific biosystem; tRNA Aminoacylation, organism-specific biosystem.
<b>Function</b>	ATP binding; ATP binding; cysteine-tRNA ligase activity; cysteine-tRNA ligase activity; cysteine-tRNA ligase activity; ligase activity; metal ion binding; nucleotide binding; protein binding; protein homodimerization activity; protein homodimerization act