

**CARS2 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP7846b****Specification**

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**CARS2 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [Q9HA77](#)**CARS2 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 79587**Other Names**

Probable cysteine--tRNA ligase, mitochondrial, CysteinyI-tRNA synthetase, CysRS, CARS2

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP7846b](/products/AP7846b) was selected from the C-term region of human CARS2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**CARS2 Antibody (C-term) Blocking Peptide - Protein Information****Name** CARS2 ([HGNC:25695](#))**Function**

Mitochondrial cysteine-specific aminoacyl-tRNA synthetase that catalyzes the ATP-dependent ligation of cysteine to tRNA(Cys).

**Cellular Location**

Mitochondrion.

**CARS2 Antibody (C-term) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

### **CARS2 Antibody (C-term) Blocking Peptide - Images**

### **CARS2 Antibody (C-term) Blocking Peptide - Background**

CARS is a class 2 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. It catalyzes the chemical reaction:  $\text{ATP} + \text{L-cysteine} + \text{tRNA(Cys)} = \text{AMP} + \text{diphosphate} + \text{L-cysteinyl-tRNA(Cys)}$ .

### **CARS2 Antibody (C-term) Blocking Peptide - References**

Bonnefond L., Biochemistry 44:4805-4816(2005)