

QARS Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP7986a**Specification**

QARS Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [P47897](#)**QARS Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 5859**Other Names**

Glutamine--tRNA ligase, Glutaminyt-tRNA synthetase, GlnRS, QARS

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7986a](/products/AP7986a) was selected from the N-term region of human QARS. 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.

QARS Antibody (N-term) Blocking Peptide - Protein Information**Name** QARS1 ([HGNC:9751](#))**Synonyms** QARS**Function**

Glutamine--tRNA ligase (PubMed: <http://www.uniprot.org/citations/26869582> target="_blank">26869582). Plays a critical role in brain development (PubMed: <http://www.uniprot.org/citations/24656866> target="_blank">24656866).

Cellular Location

Cytoplasm, cytosol. Cytoplasm

Tissue Location

Highly expressed in fetal cerebral cortex, particularly in the ventricular zone, inner subventricular zone, outer subventricular zone, and cortical plate.

QARS Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

QARS Antibody (N-term) Blocking Peptide - Images

QARS Antibody (N-term) Blocking Peptide - Background

Aminoacyl-tRNA synthetases catalyze the aminoacylation of tRNA by their cognate amino acid. Because of their central role in linking amino acids with nucleotide triplets contained in tRNAs, aminoacyl-tRNA synthetases are thought to be among the first proteins that appeared in evolution. In metazoans, 9 aminoacyl-tRNA synthetases specific for glutamine (gln), glutamic acid (glu), and 7 other amino acids are associated within a multienzyme complex. Although present in eukaryotes, glutamyl-tRNA synthetase (QARS) is absent from many prokaryotes, mitochondria, and chloroplasts, in which Gln-tRNA(Gln) is formed by transamidation of the misacylated Glu-tRNA(Gln). Glutamyl-tRNA synthetase belongs to the class-I aminoacyl-tRNA synthetase family.

QARS Antibody (N-term) Blocking Peptide - References

Ko,Y.G., J. Biol. Chem. 276 (8), 6030-6036 (2001)Kang,J., J. Biol. Chem. 275 (41), 31682-31688 (2000)Ko,Y.G., J. Cell Biol. 149 (3), 567-574 (2000)