

EARS2 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP7573c**Specification**

EARS2 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q5JPH6](#)**EARS2 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 124454**Other Names**

Probable glutamate--tRNA ligase, mitochondrial, Glutamyl-tRNA synthetase, GluRS, EARS2, KIAA1970

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7573c](/products/AP7573c) was selected from the Center region of human EARS2. 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.

EARS2 Antibody (Center) Blocking Peptide - Protein Information**Name** EARS2 ([HGNC:29419](#))**Function**

Non-discriminating glutamyl-tRNA synthetase that catalyzes aminoacylation of both mitochondrial tRNA(Glu) and tRNA(Gln) and participates in RNA aminoacylation for mitochondrial protein translation (PubMed: [19805282](http://www.uniprot.org/citations/19805282)). Attaches glutamate to tRNA(Glu) or tRNA(Gln) in a two-step reaction: glutamate is first activated by ATP to form Glu-AMP and then transferred to the acceptor end of tRNA(Glu) or tRNA(Gln) (PubMed: [19805282](http://www.uniprot.org/citations/19805282)). In vitro, cytoplasmic tRNA(Gln) is slightly glutamylated, but with low activity (PubMed: [19805282](http://www.uniprot.org/citations/19805282)).

Cellular Location

Mitochondrion matrix

EARS2 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

EARS2 Antibody (Center) Blocking Peptide - Images

EARS2 Antibody (Center) Blocking Peptide - Background

Glutamyl-tRNA synthetase (GluRS or EARS2) a class I aminoacyl-tRNA synthetase (aaRS), is primarily responsible for the glutamylation of tRNA^{Glu}. It is part of the "minimal set" of seventeen aaRSs found in every living organism and its presence is essential for the viability of cells.

EARS2 Antibody (Center) Blocking Peptide - References

Bonnefond, L., Biochemistry 44 (12), 4805-4816 (2005)