

IARS Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP7845a**Specification**

IARS Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [P41252](#)**IARS Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 3376**Other Names**

Isoleucine--tRNA ligase, cytoplasmic, Isoleucyl-tRNA synthetase, IRS, IleRS, IARS

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7845a](/products/AP7845a) was selected from the N-term region of human IARS. 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.

IARS Antibody (N-term) Blocking Peptide - Protein Information**Name** IARS1 ([HGNC:5330](#))**Synonyms** IARS**Function**

Catalyzes the specific attachment of an amino acid to its cognate tRNA in a 2 step reaction: the amino acid (AA) is first activated by ATP to form AA-AMP and then transferred to the acceptor end of the tRNA.

Cellular Location

Cytoplasm. Cytoplasm, cytosol

Tissue Location

Expressed in liver and muscle (at protein level).

IARS Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

IARS Antibody (N-term) Blocking Peptide - Images

IARS Antibody (N-term) Blocking Peptide - Background

Isoleucine-tRNA synthetase belongs to the class-I aminoacyl-tRNA synthetase family and has been identified as a target of autoantibodies in the autoimmune disease polymyositis/dermatomyositis. It catalyzes the chemical reaction: $\text{ATP} + \text{L-isoleucine} + \text{tRNA(Ile)} = \text{AMP} + \text{diphosphate} + \text{L-isoleucyl-tRNA(Ile)}$.

IARS Antibody (N-term) Blocking Peptide - References

Shiba K., Proc. Natl. Acad. Sci. U.S.A. 91:7435-7439(1994) Nichols R.C., Gene 155:299-304(1995)