

FARS2 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP4994a

Specification

FARS2 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

095363

FARS2 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 10667

Other Names

Phenylalanine--tRNA ligase, mitochondrial, Phenylalanyl-tRNA synthetase, PheRS, FARS2, FARS1

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.

FARS2 Antibody (N-term) Blocking Peptide - Protein Information

Name FARS2

Synonyms FARS1

Function

Is responsible for the charging of tRNA(Phe) with phenylalanine in mitochondrial translation. To a lesser extent, also catalyzes direct attachment of m-Tyr (an oxidized version of Phe) to tRNA(Phe), thereby opening the way for delivery of the misacylated tRNA to the ribosome and incorporation of ROS-damaged amino acid into proteins.

Cellular Location

 $\label{lem:mitochondrion} \begin{tabular}{ll} Mitochondrion matrix {ECO:0000250|UniProtKB:Q6AYQ3}. Mitochondrion {ECO:0000250|UniProtKB:Q6AYQ3} \end{tabular}$

FARS2 Antibody (N-term) Blocking Peptide - Protocols

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

• Blocking Peptides



FARS2 Antibody (N-term) Blocking Peptide - Images

FARS2 Antibody (N-term) Blocking Peptide - Background

FARS2 is a phenylalanine-tRNA synthetase (PheRS) localized to the mitochondrion which consists of a single polypeptide chain, unlike the (alpha-beta)2 structure of the prokaryotic and eukaryotic cytoplasmic forms of PheRS. Structure analysis and catalytic properties indicate mitochondrial PheRSs may constitute a class of PheRS distinct from the enzymes found in prokaryotes and in the eukaryotic cytoplasm.

FARS2 Antibody (N-term) Blocking Peptide - References

Yadavalli, S.S., et al. FEBS Lett. 583(19):3204-3208(2009)Klipcan, L., et al. Proc. Natl. Acad. Sci. U.S.A. 106(27):11045-11048(2009)Finarov, I., et al. Acta Crystallogr. Sect. F Struct. Biol. Cryst. Commun. 65 (PT 2), 93-97 (2009)