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DARS2 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP7836c

Specification

DARS2 Antibody (Center) Blocking Peptide - Product Information

Primary Accession Q6PI48

DARS2 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 55157

Other Names
Aspartate--tRNA ligase, mitochondrial, Aspartyl-tRNA synthetase, AspRS, DARS2

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7836c was selected from the Center region of humanRS2. 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.

DARS2 Antibody (Center) Blocking Peptide - Protein Information

Name DARS2

Function
Catalyzes the attachment of aspartate to tRNA(Asp) in a two- step reaction: aspartate is first activated by ATP to form Asp-AMP and then transferred to the acceptor end of tRNA(Asp).

Cellular Location
Mitochondrion matrix Mitochondrion membrane

DARS2 Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

DARS2 Antibody (Center) Blocking Peptide - Images

DARS2 Antibody (Center) Blocking Peptide - Background

Aspartyl-tRNA synthetase (DARS) is part of a multienzyme complex of aminoacyl-tRNA synthetases. Aspartyl-tRNA synthetase charges its cognate tRNA with aspartate during protein biosynthesis. Defects in DARS2 are a cause of leukoencephalopathy with brainstem and spinal cord involvement and lactate elevation (LBSL). LBSL is an autosomal recessive disease and is defined on the basis of a highly characteristic constellation of abnormalities observed by magnetic resonance imaging and spectroscopy. Affected individuals develop slowly progressive cerebellar ataxia, spasticity, and dorsal column dysfunction, sometimes with a mild cognitive deficit or decline.

DARS2 Antibody (Center) Blocking Peptide - References

Scheper,G.C., Nat. Genet. 39 (4), 534-539 (2007)Bonnefond,L., Biochemistry 44 (12), 4805-4816 (2005)