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ACMSD Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP8954a

Specification

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

Primary Accession Q8TDX5

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

Gene ID 130013

Other Names
2-amino-3-carboxymuconate-6-semialdehyde decarboxylase, Picolinate carboxylase, ACMSD

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP8954a was selected from the N-term region of human ACMSD. 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.

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

Name ACMSD

Function
Converts alpha-amino-beta-carboxymuconate-epsilon- semialdehyde (ACMS) to alpha-aminomuconate semialdehyde (AMS). ACMS can be converted non-enzymatically to quinolate (QA), a key precursor of NAD, and a potent endogenous excitotoxin of neuronal cells which is implicated in the pathogenesis of various neurodegenerative disorders. In the presence of ACMSD, ACMS is converted to AMS, a benign catabolite. ACMSD ultimately controls the metabolic fate of tryptophan catabolism along the kynurenine pathway.

ACMSD Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

ACMSD Antibody (N-term) Blocking Peptide - Images

ACMSD Antibody (N-term) Blocking Peptide - Background

ACMSD is an intermediate in the de novo synthesis pathway of NAD from tryptophan, and has been implicated in the pathogenesis of several neurodegenerative disorders. Quinolinate is derived from alpha-amino-beta-carboxy-muconate-epsilon-semialdehyde (ACMS).ACMSD (ACMS decarboxylase; EC 4.1.1.45) can divert ACMS to a benign catabolite and thus prevent the accumulation of quinolinate from ACMS.

ACMSD Antibody (N-term) Blocking Peptide - References

Garavaglia,S., et.al., FEBS J. 276 (22), 6615-6623 (2009)Fukuoka,S., et.al., J. Biol. Chem. 277 (38), 35162-35167 (2002)