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ALDH9A1 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP7850a

Specification

ALDH9A1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P49189

ALDH9A1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 223

Other Names
4-trimethylaminobutyraldehyde dehydrogenase, TMABADH, Aldehyde dehydrogenase E3 isozyme, Aldehyde dehydrogenase family 9 member A1, Gamma-aminobutyraldehyde dehydrogenase, R-aminobutyraldehyde dehydrogenase, ALDH9A1, ALDH4, ALDH7, ALDH9

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7850a was selected from the N-term region of human ALDH9A1. 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.

ALDH9A1 Antibody (N-term) Blocking Peptide - Protein Information

Name ALDH9A1

Synonyms ALDH4, ALDH7, ALDH9 {ECO:0000303|PubMed:

Function
Converts gamma-trimethylaminobutyraldehyde into gamma- butyrobetaine with high efficiency (in vitro). Can catalyze the irreversible oxidation of a broad range of aldehydes to the corresponding acids in an NAD-dependent reaction, but with low efficiency. Catalyzes the oxidation of aldehydes arising from biogenic amines and polyamines.

Cellular Location
Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q9JLJ3}. Cytoplasm

Tissue Location
Detected in brain (at protein level) (PubMed:8645224). High expression in adult liver, skeletal muscle, and kidney. Low levels in heart, pancreas, lung and brain (PubMed:8786138) Expressed in all regions of the brain. Expression levels are variable in the different brain areas, with the highest levels in the spinal cord and the lowest in the occipital pole.

ALDH9A1 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

ALDH9A1 Antibody (N-term) Blocking Peptide - Images

ALDH9A1 Antibody (N-term) Blocking Peptide - Background

ALDH9A1 belongs to the aldehyde dehydrogenase family of proteins. The protein has a high activity for oxidation of gamma-aminobutyraldehyde and other amino aldehydes. The enzyme catalyzes the dehydrogenation of gamma-aminobutyraldehyde to gamma-aminobutyric acid (GABA). This isozyme is a tetramer of identical 54-kD subunits.

ALDH9A1 Antibody (N-term) Blocking Peptide - References

Cheung,C.L., Hum. Mol. Genet. 18 (4), 679-687 (2009)Vaz,F.M., J. Biol. Chem. 275 (10), 7390-7394 (2000)Lin,S.W., Genomics 34 (3), 376-380 (1996)