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ALDH1A3 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP7847c

Specification

ALDH1A3 Antibody (Center) Blocking Peptide - Product Information

Primary Accession P47895

ALDH1A3 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 220

Other Names
Aldehyde dehydrogenase family 1 member A3, Aldehyde dehydrogenase 6, Retinaldehyde dehydrogenase 3, RALDH-3, RalDH3, ALDH1A3, ALDH6

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7847c was selected from the Center region of human ALDH1A3. 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.

ALDH1A3 Antibody (Center) Blocking Peptide - Protein Information

Name ALDH1A3

Synonyms ALDH6 {ECO:0000303|PubMed:7698756}

Function
Catalyzes the NAD-dependent oxidation of aldehyde substrates, such as all-trans-retinal and all-trans-13,14-dihydroretinal, to their corresponding carboxylic acids, all-trans-retinoate and all-trans- 13,14-dihydroretinoate, respectively (By similarity) (PubMed:27759097). High specificity for all-trans-retinal as substrate, can also accept acetaldehyde as substrate in vitro but with lower affinity (PubMed:27759097). Required for the biosynthesis of normal levels of retinoate in the embryonic ocular and nasal regions; a critical lipid in the embryonic development of the eye and the nasal region (By similarity).

Cellular Location
Cytoplasm {ECO:0000250|UniProtKB:Q9JHW9}.

Tissue Location
Expressed at low levels in many tissues and at higher levels in salivary gland, stomach, and kidney

ALDH1A3 Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

ALDH1A3 Antibody (Center) Blocking Peptide - Images

ALDH1A3 Antibody (Center) Blocking Peptide - Background

Aldehyde dehydrogenase isozymes are thought to play a major role in the detoxification of aldehydes generated by alcohol metabolism and lipid peroxidation. The enzyme ALDH1A3 uses retinal as a substrate, either in a free or cellular retinol-binding protein form.

ALDH1A3 Antibody (Center) Blocking Peptide - References

Rexer,B.N., Cancer Res. 61 (19), 7065-7070 (2001)Yoshida,A., Eur. J. Biochem. 251 (3), 549-557 (1998)