

Anti-ALDH1A1 (N-terminal region) Antibody

Catalog # AN1627

Product Information

Application WB
Primary Accession P00352
Host Mouse

Clonality Mouse Monoclonal

IsotypeIgG1Clone NamesM558Calculated MW54862

Additional Information

Gene ID 216

Other Names RALDH, ALDH-E1, ALHDII, Aldehyde dehydrogenase, ALDC, PUMB1, ALDH1A1

Target/Specificity Aldehyde dehydrogenase (ALDH) superfamily is a ubiquitous group of

enzymes found in all taxonomic domains. ALDH detoxifies endogenous and exogenous aldehydes, protecting cellular homeostasis and organismal functions. These enzymes are necessary for the synthesis of retinoic acid, betaine, and folate. Recent studies have reported high levels of ALDH found in cancer cells, suggesting that ALDH can act as a marker for cancer cells found in a wide variety of tissues including skin, prostate, lung, and neural tissues. Additionally, certain diseases can be identified when ALDH activity is absent. ALDH1A1 is vital for retinol synthesis and alcohol metabolism. ALDH1A1 active sites include an active cysteine residue, which catalyses the

transformation of aldehydes into their respective carboxylic groups. ALDH1A1

amino acid sequence and function is highly conserved in humans and

rodents.

Dilution WB~~1:1000

Format Protein G Purified

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions Anti-ALDH1A1 (N-terminal region) Antibody is for research use only and not

for use in diagnostic or therapeutic procedures.

Shipping Blue Ice

Background

Aldehyde dehydrogenase (ALDH) superfamily is a ubiquitous group of enzymes found in all taxonomic domains. ALDH detoxifies endogenous and exogenous aldehydes, protecting cellular homeostasis and

organismal functions. These enzymes are necessary for the synthesis of retinoic acid, betaine, and folate. Recent studies have reported high levels of ALDH found in cancer cells, suggesting that ALDH can act as a marker for cancer cells found in a wide variety of tissues including skin, prostate, lung, and neural tissues. Additionally, certain diseases can be identified when ALDH activity is absent. ALDH1A1 is vital for retinol synthesis and alcohol metabolism. ALDH1A1 active sites include an active cysteine residue, which catalyses the transformation of aldehydes into their respective carboxylic groups. ALDH1A1 amino acid sequence and function is highly conserved in humans and rodents.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.