

Product datasheet for **TA389046**

ALDH1A1 Mouse Antibody [Clone ID: M558]

Product data:

Product Type:	Primary Antibodies
Clone Name:	M558
Applications:	WB
Recommended Dilution:	WB: 1:1000
Reactivity:	Human, Rat, Mouse
Host:	Mouse
Isotype:	IgG1
Immunogen:	Clone M558 was generated from a recombinant protein corresponding to amino acids in the N-terminal region from human ALDH1A1. This sequence is highly conserved in rat and mouse ALDH1A1.
Specificity:	This antibody detects a 55 kDa* protein on SDS-PAGE immunoblots of human A431, HepG2, and mouse liver, as well as human recombinant ALDH1A1. The antibody does not detect ALDH1A3 in PC3 cells, ALDH1A2 in Jurkat cells, and bovine tubulin (55 kDa).
Formulation:	PBS + 1 mg/ml BSA, 0.05% NaN ₃ and 50% glycerol
Concentration:	lot specific
Purification:	Protein G Purified
Conjugation:	Unconjugated
Storage:	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Stability:	After date of receipt, stable for at least 1 year at -20°C.
Predicted Protein Size:	55
Database Link:	P00352



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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.

Note:

Protein G purified tissue culture supernatant.