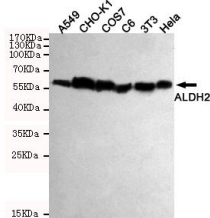




ALDH2

Mouse monoclonal Antibody

#53323

Catalog Number: 53323**Amount:** 100µg/100µl**Swiss-Prot No. :** P05091**Gene name:** aldh2**Gene id:** 217**Clone Number:** 8D4-D6-D11**Form of Antibody:** Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol**Storage/Stability:** Store at -20°C/1 year**Immunogen:** Purified recombinant human ALDH2 protein fragments expressed in E.coli**Purification:** affinity-chromatography**Specificity/Sensitivity:** This antibody detects endogenous levels of ALDH2 and does not cross-react with related proteins**Reactivity:** Human, Mouse, Rat, Monkey, Hamster**Applications:** Predicted MW: 56 kd WB: 1:1000

Western blot detection of ALDH2 in HeLa, 3T3, C6, COS7, CHO-K1 and A549 cell lysates using ALDH2 mouse mAb (1:1000 diluted). Predicted band size: 56KDa. Observed band size: 56KDa.

Background:

This protein belongs to the aldehyde dehydrogenase family of proteins. Aldehyde dehydrogenase is the second enzyme of the major oxidative pathway of alcohol metabolism. Two major liver isoforms of aldehyde dehydrogenase, cytosolic and mitochondrial, can be distinguished by their electrophoretic mobilities, kinetic properties, and subcellular localizations. Most Caucasians have two major isozymes, while approximately 50% of Orientals have the cytosolic isozyme but not the mitochondrial isozyme. A remarkably higher frequency of acute alcohol intoxication among Orientals than among Caucasians could be related to the absence of a catalytically active form of the mitochondrial isozyme. The increased exposure to acetaldehyde in individuals with the catalytically inactive form may also confer greater susceptibility to many types of cancer. This gene encodes a mitochondrial isoform, which has a low K_m for acetaldehydes, and is localized in mitochondrial matrix. Alternative splicing results in multiple transcript variants encoding distinct isoforms.