### bsm-51466M

# [ Primary Antibody ]

# Bioss

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## **ALDH2 Mouse mAb**

- DATASHEET -

Host: Mouse Isotype: IgG1,IgK
Clonality: Monoclonal CloneNo.: A02C1
GeneID: 217 SWISS: P05091

Target: ALDH2

**Purification:** affinity purified by Protein G

Concentration: 1mg/ml

**Storage:** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50%

Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated

freeze/thaw cycles.

**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 Km for acetaldehydes, and is localized in mitochondrial matrix. Alternative splicing results in multiple transcript variants encoding distinct isoforms.[provided by RefSeq, Mar 2011]

**Applications: WB** (1:500-1000)

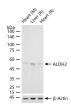
IHC-P (1:100-500) IHC-F (1:100-500) IF (1:100-500) Flow-Cyt (1:50-100) ICC/IF (1:50-200)

Reactivity: Human, Mouse, Rat

Predicted MW.: 54 kDa

Subcellular Location: Cytoplasm

### VALIDATION IMAGES



25 ug total protein per lane of various lysates (see on figure) probed with ALDH2 monoclonal antibody, unconjugated (bsm-51466M) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



Paraformaldehyde-fixed, paraffin embedded Human Prostate; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with ALDH2 Monoclonal Antibody, Unconjugated (bsm-51466M) at 1:150 overnight at  $4^{\circ}\text{C}$ , followed by conjugation to the bs-40296G-HRP and DAB (C-0010) staining.



Paraformaldehyde-fixed, paraffin embedded Human Colon; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with ALDH2 Monoclonal Antibody, Unconjugated (bsm-51466M) at 1:150 overnight at 4°C, followed by conjugation to the bs-40296G-HRP and DAB (C-0010) staining.

### — SELECTED CITATIONS —

- [IF=4.8] Jing Li. et al. Rapid antibody conjugation strategy via instant charge inversion of AuNBPs toward ultrasensitive SERS-LFIA detection of AFP. MICROCHEM J. 2024 Jul;202:110832 Other; 10.1016/j.microc.2024.110832
- [IF=1.6] Shen Xiaorong. et al. ALDH2 as an immunological and prognostic biomarker: Insights from pan-cancer analysis. MEDICINE. 2024 Apr;103(16):e37820 IHC; Human. 38640328