

### PRODUCT INFORMATION SHEET

# **Mouse Monoclonal Antibody to ALDH1A1**

Format: PURE RUO REF IQP-1858P Quantity: 0.1mg

Description

Clone 2B2G1

Isotype Mouse IgG1
Specificity ALDH1A1

Alternative names

ALDC; ALDH1; HEL-9; HEL12; PUMB1; ALDH11; RALDH1; ALDH-E1; HEL-S-53e

Species Human

Immunogen Purified recombinant fragment of human ALDH1A1 (AA: 1-110) expressed in E. Coli.

**Mw** 54.9kDa

**Format** Purified antibody in PBS with 0.05% sodium azide

#### **Summary**

The protein encoded by this gene belongs to the aldehyde dehydrogenase family. Aldehyde dehydrogenase is the next enzyme after alcohol dehydrogenase in the major pathway of alcohol metabolism. There are two major aldehyde dehydrogenase isozymes in the liver, cytosolic and mitochondrial, which are encoded by distinct genes, and can be distinguished by their electrophoretic mobility, kinetic properties, and subcellular localization. This gene encodes the cytosolic isozyme. Studies in mice show that through its role in retinol metabolism, this gene may also be involved in the regulation of the metabolic responses to high-fat diet.

**Applications** ELISA: 1/10000; WB: 1/500 - 1/2000; ICC: N/A; FCM: 1/200 - 1/400; IHC: 1/200 - 1/1000

#### Limitations

- 1. Conjugates with brighter fluorochromes, like PE and APC, will have a greater separation than those with dyes like FITC and CyQ. When populations overlap, the percentage of positive cells using a selected marker can be affected by the choice of fluorescent label.
- 2. Use of monoclonal antibodies in patient treatment can interfere with antigen target recognition by this reagent. This should be taken into account when samples are analyzed from patients treated in this fashion. IQ Products has not characterized the effect of the presence of therapeutic antibodies on the performance of this reagent.
- 3. Reagents can be used in different combinations, therefore laboratories need to become familiar performance characteristics of each antibody in relation with the combined markers in normal and abnormal samples.
- 4. Reagent data performance is based on EDTA-treated blood. Reagent performance can be affected by the use of other anticoagulants.

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## **Handling and Storage**

Store the vials at 2-8 °C for a maximum of 2 weeks and store at -20°C for longer term storage. Monoclonal antibodies should be protected from prolonged exposure to light when conjugated with fluorochromes. Reagents are stable for the period shown on the vial label when stored properly.

### Warranty

Products sold hereunder are warranted only to conform to the quantity and contents stated on the label at the time of delivery to the customer. There are no warranties, expressed or implied, which extend beyond the description on the label of the product. IQ Products is not liable for property damage, personal injury, or economic loss caused by the product.

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### Characterization

To ensure consistently high-quality reagents, each batch of monoclonal antibody is tested for conformance with characteristics of a standard reagent.

Warning

All products contain sodiumazide. This chemical is poisonous and hazardous. Handling should be done by trained staff only.

### References

1.Oncotarget. 2015 Dec 1;6(38):41360-9. 2.Biomark Med. 2015;9(8):777-90.

### **Explanation of used symbols**



		Label - tandem	Ex -max (nm)	Em -max (nm)
P	PURE	purified material		
F	FITC	FITC	488	519
R	R-PE	PE	488, 532	578
С	CyQ	PE-Cy5.18	488, 532	667
Α	APC		595, 633, 635, 647	660
PC	PerCP		488, 532	678
PCC	PerCP-Cy5.5	bric	488, 532	<sup>695</sup> cence



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