



# ALDH1A1 Monoclonal Antibody

|                    |                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Catalog No         | BYab-02321                                                                                                                                                                                                                                                                                                                                                                             |
| Isotype            | IgG                                                                                                                                                                                                                                                                                                                                                                                    |
| Reactivity         | Human                                                                                                                                                                                                                                                                                                                                                                                  |
| Applications       | WB;IHC;IF;ELISA                                                                                                                                                                                                                                                                                                                                                                        |
| Gene Name          | ALDH1A1                                                                                                                                                                                                                                                                                                                                                                                |
| Protein Name       | Retinal dehydrogenase 1                                                                                                                                                                                                                                                                                                                                                                |
| Immunogen          | Purified recombinant fragment of human ALDH1A1 expressed in E. Coli.                                                                                                                                                                                                                                                                                                                   |
| Specificity        | ALDH1A1 Monoclonal Antibody detects endogenous levels of ALDH1A1 protein.                                                                                                                                                                                                                                                                                                              |
| Formulation        | Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.                                                                                                                                                                                                                                                                                                                     |
| Source             | Monoclonal, Mouse                                                                                                                                                                                                                                                                                                                                                                      |
| Purification       | Affinity purification                                                                                                                                                                                                                                                                                                                                                                  |
| Dilution           | WB: 1/500 - 1/2000. IHC: 1/200 - 1/1000. ELISA: 1/10000.. IF 1:50-200                                                                                                                                                                                                                                                                                                                  |
| Concentration      | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                |
| Purity             | ≥90%                                                                                                                                                                                                                                                                                                                                                                                   |
| Storage Stability  | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                           |
| Synonyms           | ALDH1A1; ALDC; ALDH1; PUMB1; Retinal dehydrogenase 1; RALDH 1; RaIDH1; ALDH-E1; ALHDII; Aldehyde dehydrogenase family 1 member A1; Aldehyde dehydrogenase; cytosolic                                                                                                                                                                                                                   |
| Observed Band      |                                                                                                                                                                                                                                                                                                                                                                                        |
| Cell Pathway       | Cytoplasm, cytosol . Cell projection, axon .                                                                                                                                                                                                                                                                                                                                           |
| Tissue Specificity | Expressed by erythrocytes (at protein level).                                                                                                                                                                                                                                                                                                                                          |
| Function           | catalytic activity:Retinal + NAD(+) + H(2)O = retinoate + NADH.,function:Binds free retinal and cellular retinol-binding protein-bound retinal. Can convert/oxidize retinaldehyde to retinoic acid.,pathway:Cofactor metabolism; retinol metabolism.,similarity:Belongs to the aldehyde dehydrogenase family.,subunit:Homotetramer.,                                                   |
| Background         | 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 |

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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. [provided by RefSeq, Mar 2011],

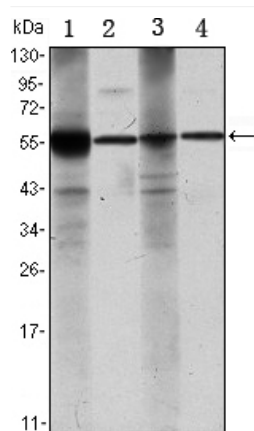
**matters needing attention**

Avoid repeated freezing and thawing!

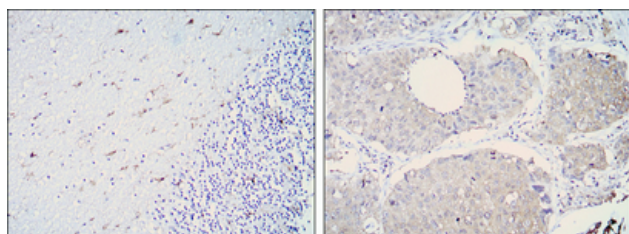
**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western Blot analysis using ALDH1A1 Monoclonal Antibody against Raji (1), Jurkat (2), THP-1 (3) and K562 (4) cell lysate.



Immunohistochemistry analysis of paraffin-embedded cerebellum tissues (left) and lung cancer (right) with DAB staining using ALDH1A1 Monoclonal Antibody.