

# Aldehyde Dehydrogenase 1 Monoclonal Mouse Antibody (ALDH1A1/1381)

## Product Description

Aldehyde dehydrogenase 1 family member A1 (ALDH1A1), also known as retinal dehydrogenase 1, belongs to the aldehyde dehydrogenase enzyme family, which is involved in the metabolism of alcohol. ALDH1A1 is predominantly expressed in the epithelium of testis, brain, eye, liver, kidney, as well as neural and hematopoietic stem cells. Reportedly, high ALDH1A1 expression is found in solitary fibrous tumor (SFT) and hemangiopericytoma (HPC), compared to meningiomas and synovial sarcomas. In combination with CD34, ALDH1A1 may be useful for the differentiation among SFT, HPC, meningioma, and synovial sarcoma. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order. **Catalog number key for antibody number 1381, Anti-ALDH1A1 (ALDH1A1/1381)**

### Product attributes

|                                       |  |
|---------------------------------------|--|
| Antibody number                       | #1381  |
| research-areas                        | Metabolism   |
| Antibody reactivity (species)         | Aldehyde dehydrogenase 1   |
| Antibody type                         | Primary  |
| Host species                          | Mouse  |
| Clonality                             | Monoclonal   |
| Clone                                 | ALDH1A1/1381   |
| Isotype                               | IgG1   |
| Molecular weight                      | 56 kDa   |
| Synonyms                              | Aldehyde dehydrogenase family 1 member A1; ALDH1A1; Retinal dehydrogenase 1; Retinaldehyde Dehydrogenase 1; Epididymis Luminal Protein   |
| Human gene symbol                     | ALDH1A1  |
| Entrez gene ID                        | 216  |
| SwissProt                             | P00352   |
| Unigene                               | 76392  |
| Immunogen                             | Purified recombinant fragment of human ALDH1A1 (aa 315-434) (exact sequence is proprietary)  |
| Verified antibody applications        | IHC (FFPE) (verified), WB (verified)   |
| Antibody target cellular localization | Cytoplasmic  |
| Species reactivity                    | Human  |
| Antibody application notes            | Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 1-2 ug/mL, Immunohistology (formalin): 0.5-1 ug/mL. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min. Flow Cytometry 0.5-1 ug/million cells/0.1 mL. Western blotting 0.5-1 ug/mL. Optimal dilution for a specific application should be determined by user |
| Positive control                      | HepG2 or A549 cells. Colon or Testicular Carcinoma.  |
| Shipping condition                    | Room temperature   |
| Storage Conditions                    | Store at 2 to 8 °C. Protect fluorescent conjugates from light. Note: store BSA-free antibodies at -10 to -35 °C  |
| Shelf life                            | Guaranteed for at least 24 months from date of receipt when stored as recommended  |
| Regulatory status                     | For research use only (RUO)  |
| Antibody/conjugate formulation        | Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide  |
| Antibody research areas               | Cancer, Metabolism   |

| Antibody # prefix | Conjugation        | Ex/Em (nm) | Laser line | Detection channel        |
|-------------------|--------------------|------------|------------|--------------------------|
| BNC04             | CF®405S            | 404/431    | 405        | DAPI (microscopy), AF405 |
| BNC88             | CF®488A            | 490/515    | 488        | GFP, FITC                |
| BNC68             | CF®568             | 562/583    | 532, 561   | RFP, TRITC               |
| BNC94             | CF®594             | 593/614    | 561        | Texas Red®               |
| BNC40             | CF®640R            | 642/662    | 633-640    | Cy®5                     |
| BNC47             | CF®647             | 650/665    | 633-640    | Cy®5                     |
| BNCB              | Biotin             | N/A        | N/A        | N/A                      |
| BNUB              | Purified           | N/A        | N/A        | N/A                      |
| BNUM              | Purified, BSA-free | N/A        | N/A        | N/A                      |

### Dye Features

[CF®405S Features](#)  
[CF®488A Features](#)  
[CF®568 Features](#)  
[CF®594 Features](#)  
[CF®640R Features](#)  
[CF®647 Features](#)

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