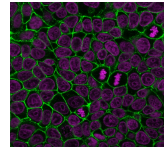


E-Cadherin / CD324 Monoclonal Mouse Antibody (4A2)



Product Description

This antibody recognizes a protein of 120-80 kDa, identified as E-cadherin. Cadherins comprise a family of Ca²⁺-dependent adhesion molecules that function to mediate cell-cell binding critical to the maintenance of tissue structure and morphogenesis. The classical cadherins, E-, N- and P-cadherin, consist of large extracellular domains characterized by a series of five homologous NH₂ terminal repeats. The relatively short intracellular domains interact with a variety of cytoplasmic proteins, such as β-catenin, to regulate cadherin function. E-cadherin plays an important role in epithelial cell adhesion. A decreased expression of E-cadherin is associated with metastatic potential and poor prognosis in breast cancer, prostate and esophageal cancer. In combination with p120 Catenin, it is useful for the differentiation between ductal (E-cadherin+) and lobular (E-cadherin-) breast carcinomas. It may also help in diagnosis of mesothelioma. 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 to inquire about stock status and lead times before placing your order.

References

Note: References for this clone sold by other suppliers may be listed for expected applications.

Cancer Res (2005) 65: 2. (immunoprecipitation; immunofluorescence)

Product attributes

| | |
|---------------------------------------|---|
| Antibody number | #1429 |
| Antibody reactivity (target) | CD324, E-Cadherin |
| Antibody type | Primary |
| Host species | Mouse |
| Clonality | Monoclonal |
| Clone | 4A2 |
| Isotype | IgG1, kappa |
| Molecular weight | 120-80 kDa (Mature); 135 kDa (Precursor) |
| Synonyms | Arc 1, cadherin 1 type 1 E-cadherin, Cadherin1, CAM 120/80, CD324, CDH1, CDHE, E-Cad/CTF3, E-cadherin, ECAD, Epithelial cadherin, epithelial calcium dependent adhesion protein, Liver cell adhesion molecule (LCAM), Uvomorulin (UVO) |
| Human gene symbol | CDH1 |
| Entrez gene ID | 999 |
| SwissProt | P12830 |
| Unigene | 461086 |
| Immunogen | Recombinant human full-length E-Cadherin protein |
| Antibody target cellular localization | Plasma membrane |
| Verified antibody applications | Flow (verified), IF (verified), IHC (FFPE) (verified), WB (verified) |
| Species reactivity | Human, Mouse, Rat |
| Expected antibody applications | IP (published for clone) |
| Antibody application notes | Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 0.5-1 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 | LS174T, Raji, HT29, SK-BR3 cells. Prostate or Colon carcinomas. |
| 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, Cell adhesion |
| Cell/tissue expression | Epithelial cells |
| Tumor expression | Breast cancer |

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

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