

Mucin 1 / EMA / Episialin / CD227 Monoclonal Mouse Antibody (GP1.4 + E29)



Product Description

In Western blotting, it recognizes proteins in MW range of 265-400 kDa, identified as different glycoforms of EMA. The a subunit has cell adhesive properties. It can act both as an adhesion and an anti-adhesion protein. EMA may provide a protective layer on epithelial cells against bacterial and enzyme attack. The ß subunit contains a C-terminal domain, which is involved in cell signaling, through phosphorylations and protein-protein interactions. In immunohistochemical assays, it superbly stains routine formalin/paraffin carcinoma tissues. Antibody to EMA is useful as a pan-epithelial marker for detecting early metastatic loci of carcinoma in bone marrow or liver.

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.

Catalog number key for antibody number 0743, Anti-CD227 (GP1.4 E29)

Cell/tissue expression

Tumor expression

| Call us : <u>800-304-5</u> | 357 Email: techsupport@biotium.com | | | | |
|--|---|--|--|--|--|
| Product attributes | | | | | |
| Antibody number | #0743 | | | | |
| Antibody reactivity (target) | CD227, EMA, Episialin, Mucin 1 | | | | |
| Antibody type | Primary | | | | |
| Host species | Mouse | | | | |
| Clonality | Monoclonal | | | | |
| Clone | GP1.4 + E29 | | | | |
| Isotype | lgG's | | | | |
| Molecular weight | 265-400 kDa | | | | |
| Synonyms | Breast carcinoma-associated antigen DF3; CA15-3; Carcinoma-associated mucin Episialin; Epithelial Membrane Antigen; H23AG; KL-6; MAM6; MUC-1; MUC-1/SEC; MUC-1/X; MUC1-alpha; MUC1-beta; MUC1-CT, MUC1-1/SEC; MUC1/ZD; Mucin 1 cell surface associated; Mucin-1 subunit beta; Peanut-reactive urinary mucin; PEM; PEMT; Polymorphic epithelial mucin; PUM; Tumor-associated epithelial membrane antigen | | | | |
| Human gene symbol | MUC1 | | | | |
| Entrez gene ID | 4582 | | | | |
| SwissProt | P15941 | | | | |
| Unigene | 89603 | | | | |
| Immunogen | Human milk fat globule membranes (GP1.4); Delipidated extract of human milk fat globule membranes (E29) | | | | |
| Antibody target cellular localization | Plasma membrane | | | | |
| Verified antibody applications | IHC (FFPE) (verified) | | | | |
| 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: 0.5-1 ug/mL, Immunohistology formalin-fixed 0.1-0.2 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 minutes, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user | | | | |
| Positive control | MCF-7 or MDA-231 cells. Breast, colon, ovarian, endometrial 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, Mucins | | | | |
| Product origin | Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot. | | | | |
| | | | | | |

Epithelial cells, Mammary gland

Breast cance

| 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 |
| BNC74 | CF®740 | 742/767 | 633-685 | 775/50 | CF®740 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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