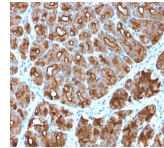


Mucin 1 / EMA / Episialin / CD227 Recombinant Monoclonal Rabbit Antibody (MUC1/2818R)



Product Description

This MAb reacts with MUC1. The dominant epitope of this MAb has not yet been determined. MUC1 is a large cell surface mucin glycoprotein expressed by most glandular and ductal epithelial cells and some hematopoietic cell lineages. It is expressed on most secretory epithelium, including mammary gland and some hematopoietic cells. It is expressed abundantly in lactating mammary glands and over expressed abundantly in 90% breast carcinomas and metastases. Transgenic MUC1 has been shown to associate with all four c-erbB receptors and localize with c-erbB1 (EGFR) in lactating glands. The MUC1 gene contains seven exons and produces several different alternatively spliced variants. The major expressed form of MUC1 uses all seven exons and is a type 1 transmembrane protein with a large extracellular tandem repeat domain. The tandem repeat domain is highly O glycosylated and alterations in glycosylation have been shown in epithelial cancer cells. 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.

Product attributes

| | |
|---------------------------------------|--|
| Antibody number | #2818 |
| Antibody reactivity (target) | CA15-3, CD227, EMA, MUC1 |
| Antibody type | Primary |
| Host species | Rabbit |
| Clonality | Recombinant Monoclonal |
| Clone | MUC1/2818R |
| Isotype | IgG |
| Molecular weight | 265-400 kDa |
| Synonyms | Breast carcinoma-associated antigen DF3; CA15-3; H23AG; KL-6; MAM6; Mucin 1 cell surface associated ; Peanut-reactive urinary mucin; PEM; PEMT; Polymorphic epithelial mucin; Tumor-associated epithelial membrane antigen |
| Human gene symbol | MUC1 |
| Entrez gene ID | 4582 |
| SwissProt | P15941 |
| Unigene | 89603 |
| Immunogen | Human milk-fat globule membranes (HMFGM) |
| Verified antibody applications | IHC (FFPE) (verified), WB (verified) |
| Antibody target cellular localization | Plasma membrane |
| Species reactivity | Human, Mouse |
| 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 |
| 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 |
| Shelf life | Guaranteed for at least 24 months from date of receipt when stored as recommended |
| Cell/tissue expression | Epithelial cells, Mammary gland |
| Antibody research areas | Cancer, Mucins |
| 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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