

## Mouse Anti-MUC1 Monoclonal Antibody

CAB-1880MH Mouse(MUC1)

Lot. No. (See product label)

### PRODUCT INFORMATION

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| <b>Product Overview</b>    | Mouse Anti-MUC1 Monoclonal Antibody                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Antigen Description</b> | This gene encodes a membrane-bound protein that is a member of the mucin family. Mucins are O-glycosylated proteins that play an essential role in forming protective mucous barriers on epithelial surfaces. These proteins also play a role in intracellular signaling. This protein is expressed on the apical surface of epithelial cells that line the mucosal surfaces of many different tissues including lung, breast stomach and pancreas. This protein is proteolytically cleaved into alpha and beta subunits that form a heterodimeric complex. The N-terminal alpha subunit functions in cell-adhesion and the C-terminal beta subunit is involved in cell signaling. Overexpression, aberrant intracellular localization, and changes in glycosylation of this protein have been associated with carcinomas. This gene is known to contain a highly polymorphic variable number tandem repeats (VNTR) domain. Alternate splicing results in multiple transcript variants. |
| <b>specificity</b>         | Human mucin-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Target</b>              | MUC1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Immunogen</b>           | Human MUC-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Host</b>                | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Isotype</b>             | IgG1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Source</b>              | Cell Culture                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Species</b>             | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Clone</b>               | C673M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Affinity Constant</b>   | Not determined                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Purification</b>        | Protein A chromatography                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>conjugation</b>         | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Applications</b>        | WB,Flow Cyt,IFA,IHC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

### PACKAGING

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| <b>Format</b>        | Purified, Liquid                                                                                                                                                                                                                                                                                  |
| <b>Concentration</b> | 2mg/ml2mg/ml                                                                                                                                                                                                                                                                                      |
| <b>Buffer</b>        | PBS                                                                                                                                                                                                                                                                                               |
| <b>Storage</b>       | Store (up to 1 month) at 2–8°C. Long term, aliquot and store at -20°C. Avoid multiple freeze/thaw cycles.                                                                                                                                                                                         |
| <b>Preservative</b>  | 10mM Sodium azide                                                                                                                                                                                                                                                                                 |
| <b>Warning</b>       | This product contains sodium azide, which has been classified as Xn (Harmful), in European Directive 67/548/EEC in the concentration range of 0.1–1.0 %. When disposing of this reagent through lead or copper plumbing, flush with copious volumes of water to prevent azide build-up in drains. |

### ANTIGEN GENE INFORMATION

**Gene Name** [MUC1 mucin 1, cell surface associated \[ Homo sapiens \]](#)

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| <b>Official Symbol</b>     | MUC1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Synonyms</b>            | MUC1; mucin 1, cell surface associated; mucin 1, transmembrane , PUM; mucin-1; CD227; PEM; episialin; DF3 antigen; H23 antigen; krebs von den Lungen-6; mucin 1, transmembrane; tumor-associated mucin; carcinoma-associated mucin; polymorphic epithelial mucin; peanut-reactive urinary mucin; tumor associated epithelial mucin; breast carcinoma-associated antigen DF3; tumor-associated epithelial membrane antigen; EMA; PUM; KL-6; MAM6; PEMT; H23AG; MUC-1; MUC-1/X; MUC1/ZD; MUC-1/SEC; |
| <b>GeneID</b>              | <a href="#">4582</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>mRNA Refseq</b>         | <a href="#">NM_001018016</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Protein Refseq</b>      | <a href="#">NP_001018016</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>MIM</b>                 | <a href="#">158340</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>UniProt ID</b>          | P15941                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Chromosome Location</b> | 1q22                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Pathway</b>             | IL-7 Signaling Pathway, organism-specific biosystem; Metabolism of proteins, organism-specific biosystem; O-linked glycosylation of mucins, organism-specific biosystem; Post-translational protein modification, organism-specific biosystem; T Cell Receptor Signaling Pathway, organism-specific biosystem; Termination of O-glycan biosynthesis, organism-specific biosystem;                                                                                                                 |
| <b>Function</b>            | RNA polymerase II core promoter proximal region sequence-specific DNA binding; p53 binding; protein binding; transcription cofactor activity;                                                                                                                                                                                                                                                                                                                                                     |