

Datasheet for ABIN7072291

**Recombinant anti-MUC1 antibody**[Go to Product page](#)

## Overview

|                |                                                                                                                       |
|----------------|-----------------------------------------------------------------------------------------------------------------------|
| Quantity:      | 200 µg                                                                                                                |
| Target:        | MUC1                                                                                                                  |
| Reactivity:    | Human                                                                                                                 |
| Host:          | Mouse                                                                                                                 |
| Antibody Type: | Recombinant Antibody                                                                                                  |
| Clonality:     | Monoclonal                                                                                                            |
| Conjugate:     | This MUC1 antibody is un-conjugated                                                                                   |
| Application:   | Immunohistochemistry (IHC), Western Blotting (WB), ELISA, Immunoprecipitation (IP),<br>Immunoradiometric Assay (IRMA) |

## Product Details

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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| Purpose:     | Anti-MUC1 [Mc5], Mouse IgG2a, kappa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Immunogen:   | Human breast epithelial mucin.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Clone:       | Mc5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Isotype:     | IgG2a kappa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Specificity: | This antibody is specific for the amino acid sequence DTRPAP of MUC1. The alpha subunit of MUC1 has cell adhesive properties. Can act both as an adhesion and an anti-adhesion protein. May provide a protective layer on epithelial cells against bacterial and enzyme attack. The beta subunit of MUC-1 contains a C-terminal domain which is involved in cell signaling, through phosphorylations and protein-protein interactions. Modulates signaling in ERK, SRC and NF-kappa-B pathways. In activated T-cells, influences directly or indirectly the Ras/MAPK pathway. |

## Product Details

Promotes tumor progression. Regulates TP53-mediated transcription and determines cell fate in the genotoxic stress response. Binds, together with KLF4, the PE21 promoter element of TP53 and represses TP53 activity.

Characteristics: Original Species of Ab: Mouse  
Original Format of Ab: IgG2

Purification: Protein A affinity purified

## Target Details

Target: MUC1

Alternative Name: MUC1 ([MUC1 Products](#))

Background: CD227, BEM, Breast epithelial mucin, Mucin-1, Breast carcinoma-associated antigen DF3, Cancer antigen 15-3, CA 15-3, Carcinoma-associated mucin, Episialin, H23AG, Krebs von den Lungen-6, KL-6, PEMT, Peanut-reactive urinary mucin, PUM, Polymorphic epithelial mucin, PEM, Tumor-associated epithelial membrane antigen, EMA, Tumor-associated mucin

UniProt: [P15941](#)

Pathways: [Negative Regulation of intrinsic apoptotic Signaling](#)

## Application Details

Application Notes: In an attempt to develop a reliable way to detect breast cancer, immunoprecipitation was performed on NPGP from HMFG using the mouse version of this antibody bound to Sepharose 4B. Furthermore, this antibody was tested in an radioimmunoassay experiment on NPGP using the mouse version of this antibody (Ceriani et al, 1992, pmid:1377884). The epitope of this antibody was mapped by ELISA using small peptides - the murine version of this antibody was used (Petrakou et al, 1998, pmid:9422085). This antibody was used to identify cells expressing the MUC1 protein. This was accomplished by using the mouse version of this antibody on cell lysates of cell transfected with the MUC1 protein in a western blot analysis (Rubinstein et al, 2006, pmid:17145869). To compare the diagnostic usefulness of different antibodies, the mouse version of this antibody was used for immunohistochemistry on cell pellets from pleural fluid specimens (Creaney et al, 2008, pmid:18454162). While developing an antibody against the alpha/beta junction of MUC1 the mouse version of this antibody was used for western blot on the MUC1 protein (Rubinstein et al, 2008, pmid:18821582). While assessing a panel of 56 anti MUC1 antibodies for their ability to detect cancer the mouse version of this antibody was used for an immunoradiometric assay on a serum made from sera from 10 different patients with

## Application Details

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breast, ovarian or colon cancer (Norum et al, 1998, pmid:9422099). To more accurately determine the epitope of this antibody, an ELISA was performed using the murine version of this antibody on different small peptides from the MUC1 protein (Karsten et al, 2004, pmid:15115750).

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|---------------|-----------------------|
| Restrictions: | For Research Use only |
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## Handling

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|                |         |
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| Concentration: | 1 mg/mL |
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|         |                              |
|---------|------------------------------|
| Buffer: | PBS with 0.02 % Proclin 300. |
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|               |         |
|---------------|---------|
| Preservative: | ProClin |
|---------------|---------|

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|--------------------|-------------------------------------------------------------------------------------------------------------------|
| Precaution of Use: | This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |
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|          |              |
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| Storage: | 4 °C, -20 °C |
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| Storage Comment: | Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C. |
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