

# Anti-MUC1 [HMFG2]

**Catalogue number:** 153187

**Sub-type:** Primary antibody

**Images:**

## Contributor

**Inventor:** Joy Burchell ; Joyce Taylor-Papadimitriou

**Institute:** Absolute Antibody ; Cancer Research UK, London Research Institute: Lincoln's Inn Fields

**Images:**

## Tool details

**\*FOR RESEARCH USE ONLY**

**Name:** Anti-MUC1 [HMFG2]

**Alternate name:** ADMCKD, ADMCKD1, Breast carcinoma associated antigen DF3, Breast carcinoma-associated antigen DF3, CA 15-3, CA15 3, CA15 3 antigen, CA15.3, Cancer antigen 15-3, Carcinoma associated mucin, Carcinoma-associated mucin, CD 227, CD227

**Class:** Recombinant

**Conjugate:** Unconjugated

**Description:** Recombinant antibody which detects several glycoforms of MUC1, a marker of breast cancer. Background and Research Application Mucin-1 (MUC1) is a membrane protein present on normal human breast epithelial cells and cell lines derived from breast carcinomas. Human MUC1 is also localised on the surface of the human milk fat globule. MUC1 is a differentiation marker and specific breast epithelial marker in normal and neoplastic mammary development and can be used to monitor response to breast cancer treatment and disease recurrence. Lower levels over time may be indicative of a positive response to treatment. It is upregulated in the lactating breast and in carcinomas. MUC1 also is involved in tumour progression and transcription through regulation of p53. This is a recombinant version of the anti-MUC1 antibody. Anti-MUC1 can react with unglycosylated MUC1, and several glycoforms.

**Purpose:**

**Parental cell:**

**Organism:**

**Tissue:**

**Model:**

**Gender:**

**Isotype:** IgG1

**Reactivity:** Human

**Selectivity:**

**Host:**

Mouse

**Immunogen:** Milk fat globule followed epithelial cells cultured from milk

**Immunogen UNIPROT ID:** P15941

**Sequence:**

**Growth properties:**

**Production details:**

**Formulation:**

**Recommended controls:**

**Bacterial resistance:**

**Selectable markers:**

**Additional notes:**

## Target details

**Target:** Mucin1 (MUC1)

**Target alternate names:**

**Target background:** Recombinant antibody which detects several glycoforms of MUC1, a marker of breast cancer. Background and Research Application Mucin-1 (MUC1) is a membrane protein present on normal human breast epithelial cells and cell lines derived from breast carcinomas. Human MUC1 is also localised on the surface of the human milk fat globule. MUC1 is a differentiation marker and specific breast epithelial marker in normal and neoplastic mammary development and can be used to monitor response to breast cancer treatment and disease recurrence. Lower levels over time may be indicative of a positive response to treatment. It is upregulated in the lactating breast and in carcinomas. MUC1 also is involved in tumour progression and transcription through regulation of p53. This is a recombinant version of the anti-MUC1 antibody. Anti-MUC1 can react with unglycosylated MUC1, and several glycoforms.

**Molecular weight:**

**Ic50:**

## Applications

**Application:** ELISA ; FACS ; IHC ; IP ; WB

**Application notes:**

## Handling

**Format:** Liquid

**Concentration:** 1 mg/ml

**Passage number:**

**Growth medium:**

**Temperature:**

**Atmosphere:**

**Volume:**

**Storage medium:**

**Storage buffer:** PBS

**Storage conditions:** Store at -20° C frozen. Avoid repeated freeze / thaw cycles

**Shipping conditions:** Shipping at 4° C

## Related tools

**Related tools:** Anti-MUC1 [HMFG2] ; Anti-MUC1 [HMFG1]

## References

**References:** ?-HPV 5 and 8 E6 disrupt homology dependent double strand break repair by attenuating BRCA1 and BRCA2 expression and foci formation. ; Wallace et al. 2015. PLoS Pathog. 11(3):e1004687. PMID: 25803638. ; Iyer et al. 2007. Oncogene. 26(1):21-9. PMID: 16878158. ; Bundy et al. 2006. Cancer Res. 66(15):7606-14. PMID: 16885360. ; Metabolic consequences of p300 gene deletion in human colon cancer cells. ; p300 is required for orderly G1/S transition in human cancer cells. ; Krubasik et al. 2006. Br J Cancer. 94(9):1326-32. PMID: 16622451. ; Absence of p300 induces cellular phenotypic changes characteristic of epithelial to mesenchyme transition. ; Iyer et al. 2004. Proc Natl Acad Sci U S A. 101(19):7386-91. PMID: 15123817. ; p300 regulates p53-dependent apoptosis after DNA damage in colorectal cancer cells by modulation of PUMA/p21 levels.