

# MUC4 Antibody (monoclonal) (M07)

Mouse monoclonal antibody raised against a partial recombinant MUC4. Catalog # AT2936a

## **Product Information**

Application	WB, IHC, E
Primary Accession	<u>Q99102</u>
Other Accession	<u>NM_004532</u>
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	5B12
Calculated MW	542307

#### **Additional Information**

Gene ID	4585
Other Names	Mucin-4, MUC-4, Ascites sialoglycoprotein, ASGP, Pancreatic adenocarcinoma mucin, Testis mucin, Tracheobronchial mucin, Mucin-4 alpha chain, Ascites sialoglycoprotein 1, ASGP-1, Mucin-4 beta chain, Ascites sialoglycoprotein 2, ASGP-2, MUC4
Target/Specificity	MUC4 (NP_004523, 79 a.a. ~ 188 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~250 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	MUC4 Antibody (monoclonal) (M07) is for research use only and not for use in diagnostic or therapeutic procedures.

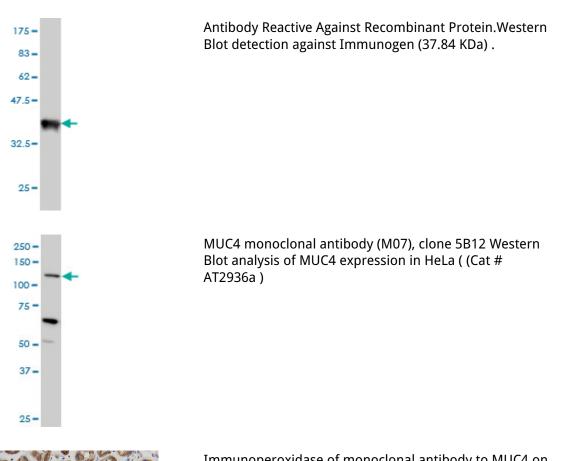
## Background

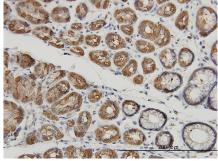
The major constituents of mucus, the viscous secretion that covers epithelial surfaces such as those in the trachea, colon, and cervix, are highly glycosylated proteins called mucins. These glycoproteins play important roles in the protection of the epithelial cells and have been implicated in epithelial renewal and differentiation. This gene encodes an integral membrane glycoprotein found on the cell surface, although secreted isoforms may exist. At least two dozen transcript variants of this gene have been found, although for many of them the full-length transcript has not been determined or they are found only in tumor tissues. This gene contains a region in the coding sequence which has a variable number (>100) of 48 nt tandem repeats.

# References

1.Expression of MUC1 and MUC4 in Gallbladder Adenocarcinoma.Kim SM, Oh SJ, Hur B.Korean J Pathol. 2012 Oct;46(5):429-35. doi: 10.4132/KoreanJPathol. 2012.46.5.429. Epub 2012 Oct 25.2.Identification of a novel type of CA19-9 carrier molecules in human bile and sera of cancer patients: An implication of the involvement in non-secretory exocytosis.Uozumi N, Gao C, Yoshioka T, Nakano M, Moriwaki K, Nakagawa T, Masuda T, Tanabe M, Miyoshi E.J Proteome Res. 2010 Nov 10. [Epub ahead of print]3.Establishment and characterization of a new human pancreatic adenocarcinoma cell line with high metastatic potential to the lung.Kalinina T, Gungor C, Thieltges S, Moller-Krull M, Murga Penas EM, Wicklein D, Streichert T, Schumacher U, Kalinin V, Simon R, Otto B, Dierlamm J, Schwarzenbach H, Effenberger KE, Bockhorn M, Izbicki JR, Yekebas EF.BMC Cancer. 2010 Jun 16;10(1):295. [Epub ahead of print]4.Isolation and identification of potential urinary microparticle biomarkers of bladder cancer.Smalley DM, Sheman NE, Nelson K, Theodorescu D.J Proteome Res. 2008 May;7(5):2088-96. Epub 2008 Mar 29.

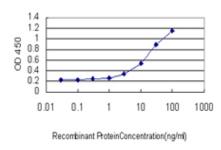






Immunoperoxidase of monoclonal antibody to MUC4 on formalin-fixed paraffin-embedded human stomach. [antibody concentration 3 ug/ml]

Detection limit for recombinant GST tagged MUC4 is approximately 0.3ng/ml as a capture antibody.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.