

## Basic Information

<b>Product Name</b>	Anti-CA15-3/MUC1 Antibody (Clone#OTI2F6)	
<b>Gene Name</b>	MUC1	
<b>Source</b>	Mouse	
<b>Clonality</b>	Monoclonal	
<b>Isotype</b>	IgG1	
<b>Species Reactivity</b>	human	
<b>Tested Application</b>	WB, IHC, ICC/IF	
<b>Contents</b>	PBS (PH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.	
<b>Immunogen</b>	Full length human recombinant protein of human MUC1 (NP_001018016) produced in HEK293T cell.	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)	
<b>Observed MW</b>	25.1 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:2000
	Immunohistochemistry (IHC):	1:150
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:100

## Storage

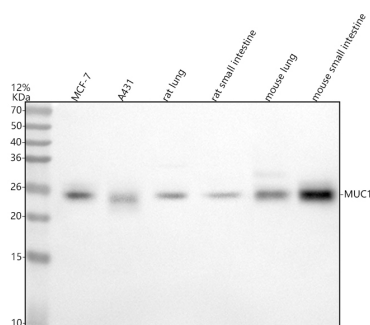
Stable for 12 months from date of receipt. Store at -20°C as received.

## Background Information

Mucin 1, cell surface associated (MUC1) or polymorphic epithelial mucin (PEM) is a mucin encoded by the MUC1 gene in humans. 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. It is mapped to 1q22. Mucin 1 is a transmembrane mucin normally expressed on the apical borders of secretory epithelial cells. Overexpression of Mucin 1 is often associated with colon, breast, ovarian, lung and pancreatic cancers. The protein serves a protective function by binding to pathogens and also functions in a cell signaling capacity. Mucin 1 stimulated ESR1-mediated transcription and contributed to estradiol-mediated growth and survival of breast cancer cells. This gene also can suppress pulmonary innate immunity, and its antiinflammatory activity may play an important

modulatory role during microbial infection.

## Selected Validation Data



Western blot analysis of anti-MUC1 antibody (M00187-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human MCF-7 whole cell lysates,

Lane 2: human A431 whole cell lysates,

Lane 3: rat lung tissue lysates,

Lane 4: rat small intestine tissue lysates,

Lane 5: mouse lung tissue lysates,

Lane 6: mouse small intestine tissue lysates.

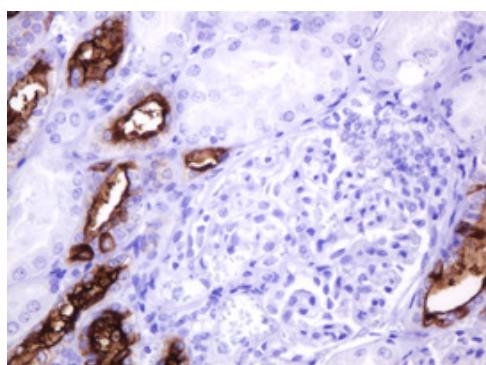
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with mouse anti-MUC1 antigen

affinity purified monoclonal antibody (M00187-2) at a dilution of

1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was

detected for MUC1 at approximately 25 kDa. The expected band size for MUC1 is at 122 kDa.



Immunohistochemical staining of paraffin-embedded Human Kidney tissue within the normal limits using anti-MUC1 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min, M00187-2)

Product datasheet

**Anti-CA15-3/MUC1 Antibody  
(Clone#OTI2F6)**

**Catalog Number: M00187-2**

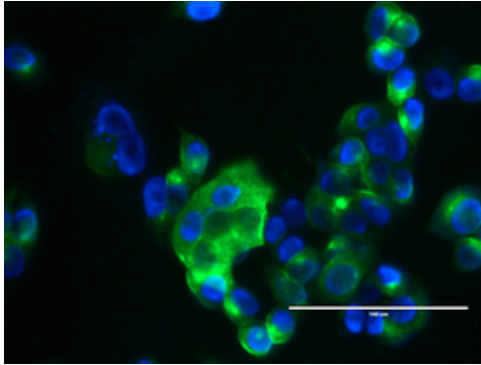
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Immunofluorescent staining of MCF-7 cells using anti-MUC1 mouse monoclonal antibody.