

## ARG54639 anti-MUC2 / Mucin 2 antibody [B306.1]

Package: 100 μl Store at: -20°C

# Summary

Product Description	Mouse Monoclonal antibody [B306.1] recognizes MUC2 / Mucin 2
Tested Reactivity	Hu
Tested Application	ICC/IF, IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Clone	B306.1
Isotype	lgG1
Target Name	MUC2 / Mucin 2
Species	Human
Immunogen	Raised against a synthetic Mucin 2 of human origin
Conjugation	Un-conjugated
Alternate Names	MUC-2; MLP; Intestinal mucin-2; SMUC; Mucin-2

#### **Application Instructions**

Application table	Application	Dilution
	ICC/IF	Assay-dependent
	IHC-P	Assay-dependent
	WB	Assay-dependent
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Colon tissue	

#### Properties

Form	Liquid
Purification	Purified Antibody
Buffer	1X PBS and 0.1% Sodium azide
Preservative	0.1% Sodium azide
Concentration	0.2 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

### Bioinformation

Database links	GeneID: 4583 Human
	Swiss-port # Q02817 Human
Gene Symbol	MUC2
Gene Full Name	mucin 2, oligomeric mucus/gel-forming
Background	This gene encodes a member of the mucin protein family. Mucins are high molecular weight glycoproteins produced by many epithelial tissues. The protein encoded by this gene is secreted and forms an insoluble mucous barrier that protects the gut lumen. The protein polymerizes into a gel of which 80% is composed of oligosaccharide side chains by weight. The protein features a central domain containing tandem repeats rich in threonine and proline that varies between 50 and 115 copies in different individuals. Alternatively spliced transcript variants of this gene have been described, but their full-length nature is not known. [provided by RefSeq, Jul 2008]
Function	Coats the epithelia of the intestines, airways, and other mucus membrane-containing organs. Thought to provide a protective, lubricating barrier against particles and infectious agents at mucosal surfaces. Major constituent of both the inner and outer mucus layers of the colon and may play a role in excluding bacteria from the inner mucus layer. [UniProt]
Research Area	Cancer antibody; Controls and Markers antibody; Signaling Transduction antibody
Calculated Mw	540 kDa
PTM	O-glycosylated. May undergo proteolytic cleavage in the outer mucus layer of the colon, contributing to the expanded volume and loose nature of this layer which allows for bacterial colonization in contrast to the inner mucus layer which is dense and devoid of bacteria. At low pH of 6 and under, undergoes autocatalytic cleavage in vitro in the N-terminal region of the fourth VWD domain. It is likely that this also occurs in vivo and is triggered by the low pH of the late secretory pathway.