ARG55969
anti-MUC2 / Mucin 2 antibody [CCP58]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [CCP58] recognizes MUC2 / Mucin 2
Tested Reactivity	Hu
Tested Application	IHC-P
Host	Mouse
Clonality	Monoclonal
Clone	CCP58
Isotype	IgG1, kappa
Target Name	MUC2 / Mucin 2
Species	Human
Immunogen	Synthetic peptide from Human MUC2 protein. (KYPTTTPISTTTMVTPTPTPTGTQTPTTT)
Conjugation	Un-conjugated
Alternate Names	MUC-2; MLP; Intestinal mucin-2; SMUC; Mucin-2

Application Instructions

Application table

Application	Dilution
IHC-P	0.5 - 1 µg/ml

Application Note: IHC-P: Antigen Retrieval: Boil tissue section in 10 mM Tris-HCl buffer (pH 10.0) for 10-20 min, followed by cooling at RT for 20 min.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

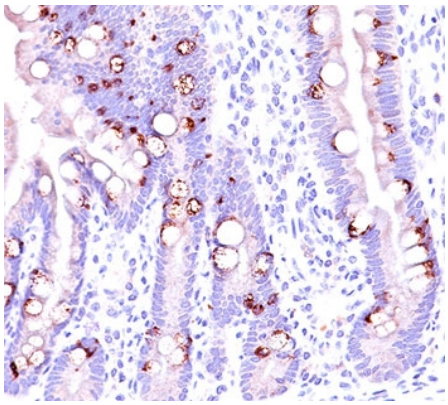
Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.05% Sodium azide and 0.1 mg/ml BSA
Preservative	0.05% Sodium azide
Stabilizer	0.1 mg/ml BSA
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.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

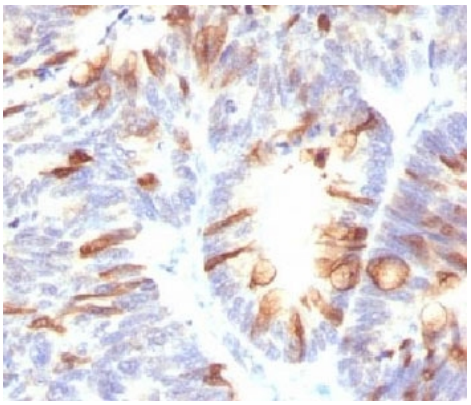
Database links	GeneID: 4583 Human Swiss-port # Q02817 Human
Gene Symbol	MUC2
Gene Full Name	mucin 2, oligomeric mucus/gel-forming
Background	This gene encodes a member of the mucin protein family. Mucins are high molecular weight glycoproteins produced by many epithelial tissues. The protein encoded 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]
Highlight	Related products: MUC2 antibodies; Anti-Mouse IgG secondary antibodies; Related news: More than a biomarker, CA19-9 is a therapeutic target of pancreatic cancer
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.
Cellular Localization	Cytoplasmic and cell surface

Images



ARG55969 anti-MUC2 / Mucin 2 antibody [CCP58] IHC-P image

Immunohistochemistry: Formalin-fixed, paraffin-embedded normal Human intestine stained with ARG55969 anti-MUC2 / Mucin 2 antibody [CCP58].



ARG55969 anti-MUC2 / Mucin 2 antibody [CCP58] IHC-P image

Immunohistochemistry: Formalin-fixed, paraffin-embedded Human colon carcinoma stained with ARG55969 anti-MUC2 / Mucin 2 antibody [CCP58].