

**Localization** – Membrane

**Host Species** – Rabbit

**Ig Class** – IgG / Kappa

### Intended Use

This antibody is designed for the specific localization of MUC3 / Mucin3 in formalin-fixed, paraffin-embedded (FFPE) tissue sections.

### Storage & Handling

Store RTU Vial at 2-8°C. Fresh dilutions for concentrated antibodies, if required, should be prepared prior to use and are stable for up to one day at room temperature (20-26°C).

### Working Principle

IHC is a two-step process wherein the primary antibody binds to the antigen of interest and that binding is detected by a chromogen. The primary antibody may be used in IHC using manual techniques or any Automated Staining System. Positive and negative controls should always be run simultaneously with all patient specimens.

### Product Description

The monoclonal antibody recognizes a high-molecular weight glycoprotein identified as mucin 3 (MUC3), with epitope mapping localized to the amino acid motif SITTTE. The antibody demonstrates no cross-reactivity with human milk fat globule membranes or with other mucin family members, including MUC1 and MUC2. Physiologically, MUC3 is predominantly expressed in the colonic and rectal epithelium, with lower-level expression observed in breast, lung, and salivary gland tissues. Mucins constitute a family of highly glycosylated secreted and/or membrane-associated glycoproteins characterized by a core protein containing variable numbers of tandem repeat (VNTR) sequences encoded by repetitive genomic elements (e.g., 60 bp for MUC1, 69 bp for MUC2, and 51 bp for MUC3). The VNTR region exhibits marked allelic polymorphism, resulting in substantial interindividual variability in repeat number. MUC1 is expressed as both a type I transmembrane protein and a secreted form and is aberrantly overexpressed and glycosylated in epithelial malignancies, including breast carcinoma. MUC2 is a major gel-forming mucin coating the intestinal and airway epithelium and is frequently associated with colonic neoplasia. MUC3 is a prominent constituent of mucous gels and demonstrates broad expression in both normal tissues and neoplastic cells.

### Material Supplied

MUC3 / Mucin3 antibody is affinity purified and diluted in PBS, pH 7.4, containing 1% BSA and 0.09% sodium azide.

### Material required But Not Supplied

- Xylene
- DI Water
- Control Tissues
- Isopropyl alcohol
- Antigen retrieval buffers
- Hematoxylin
- Positive charged slides
- Blocking Reagents
- Mounting media
- Wash Buffer
- Detection System
- Cover glass

### Working Reagent Procedure

- Ready-to-Use antibodies have been optimized for use with the recommended protocols and should not require further dilution.
- Concentrated antibodies must be diluted in accordance with the recommended protocol.

### Recommended Protocol

Refer the following table for the details on specific recommended protocol for this antibody.

<b>Control Tissue</b>	Human small intestine	<b>Antibody Incubation Time</b>	30-60 Minutes at RT
<b>Dilution factor</b>	<b>1:20-50</b> (Antibody Diluent: DH144)	<b>Retrieval Pre-treatment</b>	<b>Tris-EDTA based HIER</b> (AR9 Buffer: DH020)

### Precautions

*This product should be used by qualified and trained professional users only.*

Avoid microbial contamination of reagents to minimize non-specific staining. Never pipette reagents by mouth. Avoid contact of reagents and specimens with skin. If reagents or specimens come into contact with sensitive area, wash with sufficient amounts of water. Dispose of the unused reagents. This kit contain sodium azide at concentrations of less than 0.1%. Sodium azide is not classified as a hazardous chemical at these concentrations, but proper handling protocols should be observed. For more information on product hazards, precautions and waste disposal, *Material Safety Data Sheets* are available upon request.










### Limitations

Improper tissue handling and processing prior to immunostaining can lead to inconsistent results. Variations in embedding and fixation or the nature of the tissue may lead to variations in results. Endogenous peroxidase activity or pseudo peroxidase activity in erythrocytes and tissue biotin may result in non-specific staining based on the detection system employed. Tissues containing Hepatitis B Surface Antigen (HBsAg) may give false positive with horseradish peroxidase systems. Improper counterstaining and mounting may compromise the interpretation of results. Interpretation of the staining result is solely the responsibility of the user. Experimental results should be confirmed by a medically-established diagnostic product or procedure. Evaluation must be performed by a qualified pathologist.

### Troubleshooting

For Technical Support contact us at +91 - 7506501122 or [info@dygnova.com](mailto:info@dygnova.com) or your local distributor to report unusual staining.

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	Manufacturer Details		Use by Date		Lot/Batch Number
	Manufacturing Date		Consult Instructions for Use		Catalogue Number
	Temperature Limits		Sufficient for 'n' assays / tests		In-vitro Diagnostic Medical Device