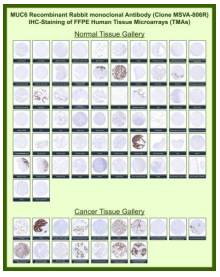
MUC6 Antibody for IHC / Mucin 6 Immunohistochemistry Antibody [clone MSVA-806R] (V5954)

Catalog No.	Formulation	Size
V5954-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V5954-20UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug

Recombinant RABBIT MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	MSVA-806R
UniProt	Q6W4X9
Localization	Secreted
Applications	Immunohistochemistry (FFPE) : 1:100-1:200
Limitations	This MUC6 Antibody for IHC / Mucin 6 Immunohistochemistry Antibody is available for research use only.



MUC6 Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of Mucin 6 MUC6 in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays using recombinant rabbit monoclonal MUC6 antibody clone MSVA-806R. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates distinct cytoplasmic localization in pyloric gland epithelium and Brunner glands, consistent with gastric-type mucin expression, while non-glandular and non-epithelial compartments including stromal and mesenchymal tissues show minimal to absent staining. Additional cytoplasmic staining is observed in select glandular epithelial tissues. Within tumor tissue microarrays, positive staining is detected in a subset of glandular and mucinous carcinomas, supporting identification of tumors with gastric or pyloric differentiation, while many non-mucinous malignancies remain largely negative. Evaluation across large TMA panels enables direct comparison of MUC6 expression across diverse tissue types under standardized conditions. The observed staining patterns align with reported MUC6 expression profiles in publicly available datasets including the Human Protein Atlas.

Description

Mucin 6 (MUC6) is a secreted gel-forming mucin predominantly expressed in gastric pyloric glands and duodenal Brunner glands, where it contributes to mucosal protection, epithelial barrier function, and glandular differentiation. MUC6 Antibody for IHC is specifically optimized for detection of pyloric-type mucin expression in formalin-fixed, paraffin-embedded tissues, enabling high-contrast visualization of glandular epithelial compartments and mucin-associated differentiation patterns in histological sections.

MUC6 antibody, also referred to as Mucin 6 antibody or pyloric gland mucin antibody, is widely used in immunohistochemistry as a marker of gastric-type glandular differentiation. In IHC staining, MUC6 is typically observed as strong cytoplasmic and luminal HRP-DAB brown signal within mucus-secreting epithelial cells, particularly in pyloric glands and Brunner glands. This restricted staining pattern allows precise identification of specific epithelial subtypes, while most non-mucinous epithelial tissues and non-epithelial compartments such as stroma, muscle, and lymphoid tissue show minimal to absent staining, supporting its specificity in tissue-based analysis.

Clone MSVA-806R is a recombinant rabbit monoclonal antibody developed for high-affinity and reproducible detection of MUC6 in FFPE samples. This clone produces strong, well-defined cytoplasmic staining with low non-specific background under standard antigen retrieval conditions, enabling clear identification of mucin-producing glandular cells within complex tissue architecture. In Tissue Microarray (TMA) analysis, MUC6 Antibody for IHC demonstrates highly consistent staining across large panels of normal and cancer tissues, allowing side-by-side comparison of mucin expression patterns across hundreds of tissue cores within a single experimental framework.

In normal tissue microarrays, MUC6 expression is prominently detected in gastric pyloric glands and duodenal Brunner glands, where strong HRP-DAB brown signal highlights mucus-secreting glandular epithelium and luminal structures. This staining provides clear visualization of glandular organization and epithelial differentiation across gastrointestinal tissues. Most other tissues, including non-glandular epithelium and mesenchymal compartments, remain largely negative, reinforcing the lineage specificity of MUC6 in immunohistochemistry.

In cancer tissue microarrays, MUC6 Antibody for IHC reveals cytoplasmic staining in a subset of glandular and mucinous carcinomas, including gastric adenocarcinoma and tumors exhibiting pyloric or gastric-type differentiation. Tumor cores often show heterogeneous staining patterns, reflecting variability in mucin expression during malignant transformation. This staining profile is particularly useful for identifying gastric differentiation, supporting tumor classification, and distinguishing mucin-producing carcinomas from non-mucinous malignancies in tissue sections.

The robust and reproducible performance of clone MSVA-806R in TMA-based immunohistochemistry supports its application in cancer research, tumor profiling, and studies of epithelial differentiation. MUC6 Antibody for IHC enables reliable detection of mucin-producing cells in FFPE tissues and is well suited for high-throughput tissue microarray analysis, comparative pathology, and evaluation of gastric-type differentiation across diverse normal and malignant tissue types.

This antibody is also part of a broader collection of IHC antibodies validated by tissue microarray analysis, supporting consistent staining across normal and cancer tissues.

Application Notes

1. Optimal dilution of the MUC6 Antibody for IHC / Mucin 6 Immunohistochemistry Antibody should be determined by the researcher.

2. This Mucin 6/MUC6 antibody is recombinantly produced by expression in human HEK293 cells.

3. Manual Protocol: Freshly cut sections should be used (less than 10 days between cutting and staining). Heat-induced antigen retrieval for 5 minutes in an autoclave at 121oC in pH 7.8 Target Retrieval Solution buffer. Apply the antibody at a dilution of 1:150 at 37oC for 60 minutes. Visualization of bound antibody by the EnVision Kit (Dako, Agilent) according to

the manufacturer's directions.

Immunogen

Recombinant human MUC6 protein was used as the immunogen for the Mucin 6/MUC6 antibody.

Storage

Mucin 6/MUC6 antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

Alternate Names

MUC6 IHC antibody, Mucin 6 immunohistochemistry antibody, Pyloric gland mucin antibody, MUC6 TMA antibody, Mucin 6 tissue staining antibody