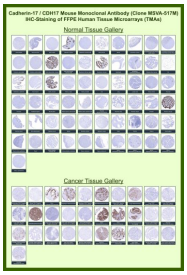
CDH17 Antibody for IHC / Liver intestine cadherin [clone MSVA-517M] (V6058)

Catalog No.	Formulation	Size
V6058-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6058-20UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	MSVA-517M
UniProt	Q12864
Localization	Cell membrane
Applications	Immunohistochemistry (FFPE) : 1:100-1:200
Limitations	This CDH17/Liver intestine cadherin antibody is available for research use only.



CDH17 Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of Cadherin 17 CDH17, also known as Liver-intestine cadherin, in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays using recombinant mouse monoclonal CDH17 antibody clone MSVA-517M. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates strong membranous localization in gastrointestinal epithelial cells, particularly within small intestine and colon mucosa, consistent with lateral cell membrane distribution, while most non-gastrointestinal tissues remain largely negative. Within tumor tissue microarrays, membranous CDH17 expression is observed in colorectal adenocarcinoma and other gastrointestinal-derived tumors, supporting its role as a marker of intestinal differentiation, whereas many non-intestinal malignancies show weak or absent staining. Evaluation across large TMA panels enables direct comparison of CDH17 expression across diverse tissue types under standardized conditions. The observed staining patterns align with reported CDH17 expression profiles in publicly available datasets including the Human Protein Atlas.

Description

CDH17 antibody recognizes Cadherin 17, a calcium-dependent cell adhesion molecule encoded by the CDH17 gene located on chromosome 8q22.1. CDH17 Antibody for IHC is optimized for detecting this intestinal-type cadherin in formalin-fixed, paraffin-embedded tissue specimens. Cadherin 17 is widely known as Liver-intestine cadherin and LI-cadherin, and it differs structurally from classical cadherins because it lacks the conserved cytoplasmic catenin-binding domain. The protein localizes primarily to the plasma membrane of epithelial cells, where it supports calcium-dependent adhesion and maintenance of epithelial architecture in gastrointestinal tissues.

Liver intestine cadherin antibody, also referred to as Cadherin 17 antibody and CDH17 antibody in the literature, targets a member of the cadherin superfamily characterized by seven extracellular cadherin repeats and a short cytoplasmic tail. Unlike E-cadherin, Cadherin 17 mediates adhesion independently of beta-catenin interaction. It is strongly expressed in small intestine and colon epithelium and is also detected in pancreatic ducts and certain gastric epithelial cells. In tissue sections, staining is typically membranous and highlights glandular epithelial structures with preserved polarity.

Aberrant CDH17 expression has been reported in colorectal adenocarcinoma, gastric carcinoma, pancreatic adenocarcinoma, and other gastrointestinal malignancies. In tumor specimens, Cadherin 17 frequently demonstrates strong membranous staining in well-differentiated epithelial tumor cells, reflecting maintenance of intestinal lineage features. Altered or reduced expression patterns may correlate with tumor progression or dedifferentiation in certain settings. CDH17 antibody is therefore widely used in research evaluating gastrointestinal tumor differentiation and epithelial lineage identity.

Beyond its adhesive function, Cadherin 17 has been implicated in signaling pathways influencing cell proliferation and migration. Experimental evidence suggests that CDH17 may contribute to tumor growth and survival in colorectal cancer models. Its consistent expression in intestinal-type epithelium supports its value as a marker of gastrointestinal epithelial differentiation.

This mouse monoclonal antibody clone MSVA-517M targets Cadherin 17 for tissue-based research applications. By enabling visualization of CDH17 expression and membranous localization in formalin-fixed specimens, this Liver intestine cadherin antibody supports investigations into gastrointestinal epithelial biology at NSJ Bioreagents.

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 CDH17 antibody for IHC should be determined by the researcher.

2. This CDH17 antibody for IHC is recombinantly produced by expression in CHO 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

A recombinant fragment (around amino acids 242-418) of human Cadherin 17 protein (CDH17) (exact sequence is proprietary) was used as the immunogen for the CDH17 antibody for IHC.

Storage

CDH17/Liver intestine cadherin antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.