EpCAM Antibody for IHC / EpCAM Immunohistochemistry Antibody [clone MSVA-326R] (V5938)

Catalog No.	Formulation	Size
V5938-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V5938-20UG	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-326R
UniProt	P16422
Localization	Cell junction, Lateral cell membrane, Tight junction
Applications	Immunohistochemistry (FFPE): 1:100-1:200
Limitations	This EpCAM Antibody for IHC / EpCAM Immunohistochemistry Antibody is available for research use only.



EpCAM Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of Epithelial cell adhesion molecule EPCAM, also known as CD326, in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays using recombinant rabbit monoclonal EpCAM antibody clone MSVA-326R. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates strong membranous localization in epithelial structures, including colon mucosa, small intestine, stomach, prostate, and endometrial glands, while non-epithelial tissues such as skeletal muscle, lymphoid tissues, and stromal compartments show minimal to absent staining. Within tumor tissue microarrays, robust membranous positivity is observed across multiple epithelial malignancies including colorectal adenocarcinoma, breast carcinoma, lung adenocarcinoma, ovarian carcinoma, pancreatic carcinoma, and urothelial carcinoma, while mesenchymal tumors and non-epithelial malignancies remain largely negative. Evaluation across large TMA panels enables direct comparison of EPCAM expression across diverse tissue types under standardized conditions. The observed staining patterns align with reported EPCAM expression profiles in the Human Protein Atlas and support its use in identifying epithelial-derived tumor cells.

Description

Epithelial cell adhesion molecule (EPCAM), also known as CD326, is a transmembrane epithelial glycoprotein that functions in cell adhesion, proliferation, and signaling within epithelial tissues and carcinomas. EpCAM Antibody for IHC is optimized for detection of CD326 expression in formalin-fixed, paraffin-embedded tissues, supporting high-resolution evaluation of epithelial lineage and tumor-associated staining patterns in histological sections.

EpCAM antibody, also referred to as CD326 antibody or TACSTD1 antibody, is widely used in immunohistochemistry as a robust epithelial marker with strong membranous localization. EpCAM is highly expressed in normal epithelial tissues including gastrointestinal mucosa, glandular epithelium, and ductal structures, while non-epithelial tissues such as muscle, connective tissue, and most neural tissues remain largely negative. This distinct distribution makes EpCAM Antibody for IHC particularly valuable for identifying epithelial cells and distinguishing epithelial-derived tumors from surrounding stromal or mesenchymal components.

Clone MSVA-326R is a recombinant rabbit monoclonal antibody developed for consistent and high-affinity detection of EpCAM in FFPE samples. This clone produces strong, clean membranous staining with minimal non-specific background, supporting clear visualization of epithelial architecture across a wide range of tissues. In Tissue Microarray (TMA) analysis, EpCAM Antibody for IHC demonstrates highly reproducible staining across hundreds of cores, enabling direct comparison of expression patterns between normal and malignant tissues within the same experimental framework.

In normal tissue TMAs, EpCAM expression is prominently observed in epithelial compartments such as intestinal mucosa, pancreatic ducts, prostate glands, bronchial epithelium, and other glandular tissues, with consistent membranous HRP-DAB brown staining. In contrast, tissues lacking epithelial components show little to no staining, reinforcing the specificity of CD326 as an epithelial lineage marker. These staining patterns align with established protein expression datasets, supporting reliable interpretation in tissue-based studies.

In cancer tissue microarrays, EpCAM Antibody for IHC reveals strong and often diffuse membranous staining in a wide range of epithelial malignancies, including colorectal, gastric, pancreatic, breast, ovarian, and lung carcinomas. Tumor cores frequently demonstrate increased staining intensity compared to corresponding normal tissues, reflecting EpCAM's role in tumor proliferation, signaling, and epithelial differentiation. Importantly, stromal regions, immune infiltrates, and non-epithelial tumor components remain largely negative, providing clear contrast that aids in tumor identification and morphological assessment.

The performance of clone MSVA-326R in TMA-based immunohistochemistry supports its use in high-throughput tissue screening, biomarker validation, and comparative oncology studies. EpCAM Antibody for IHC enables consistent detection across large sample cohorts, making it well suited for studies evaluating tumor heterogeneity, epithelial differentiation status, and cancer progression. Its strong, reproducible staining characteristics and compatibility with standard antigen retrieval protocols make it a reliable reagent for FFPE tissue analysis and tissue microarray applications.

Explore our EpCAM Antibody / Epithelial Cell Marker Antibody page for additional validation data and applications involving epithelial cell identification, tissue organization, and epithelial-derived tumor research.

This antibody is 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 EpCAM Antibody for IHC / EpCAM Immunohistochemistry Antibody should be determined by the researcher.

2. This EpCAM/Epithelial cell adhesion molecule 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

A recombinant fragment from the extracellular domain of human EpCAM protein (around amino acids 100-224) (exact sequence is proprietary) was used as the immunogen for the recombinant CD326/EpCAM antibody.

Storage

Recombinant CD326/EpCAM antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

Alternate Names

CD326 IHC antibody, EpCAM immunohistochemistry antibody, TACSTD1 antibody, Epithelial cell adhesion molecule antibody, EpCAM TMA antibody

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