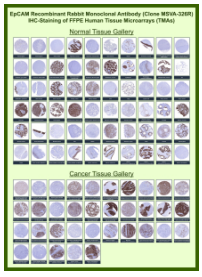
CD326 Antibody / Epithelial cell adhesion molecule [clone MSVA-326R] (V5938)

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 recombinant CD326/Epithelial cell adhesion molecule antibody is available for research use only.



Immunohistochemistry analysis of recombinant CD326 / Epithelial cell adhesion molecule antibody (clone MSVA-326R) in human normal and cancer tissues. Formalin-fixed, paraffin-embedded human tissue microarrays were stained using recombinant CD326/Epithelial cell adhesion molecule antibody (clone MSVA-326R). Strong membranous staining is observed in a wide range of normal epithelial tissues including colon mucosa, small intestine, stomach, prostate, endometrium, and other glandular epithelia, while non-epithelial tissues such as skeletal muscle and lymphoid structures show minimal to absent staining. In cancer tissues, prominent membranous positivity is seen in multiple carcinomas including colorectal adenocarcinoma, breast carcinoma, lung adenocarcinoma, ovarian carcinoma, pancreatic carcinoma, and urothelial carcinoma. Mesenchymal tumors and non-epithelial malignancies show little to no staining. The staining pattern aligns with Human Protein Atlas expression data and reflects epithelial lineage-restricted expression of CD326/EpCAM.

Description

CD326 Antibody recognizes Epithelial cell adhesion molecule, also known as EpCAM and encoded by the EPCAM gene. CD326 antibody is widely used in diagnostic pathology and tumor biology research due to the well-established expression of EpCAM on epithelial cells and many epithelial-derived carcinomas. Epithelial cell adhesion molecule antibody is also commonly referred to in the literature as EpCAM antibody, TACSTD1 antibody, and Epithelial specific antigen antibody, reflecting its importance in epithelial differentiation and tumor detection.

Epithelial cell adhesion molecule is a type I transmembrane glycoprotein localized primarily to the basolateral surface of epithelial cells. Structurally, EpCAM contains an extracellular domain involved in homophilic cell adhesion, a single-pass transmembrane region, and a short intracellular tail that participates in intracellular signaling. CD326 plays a role in cell-cell adhesion, epithelial integrity, and regulation of proliferation. CD326 Antibody is frequently used to evaluate epithelial origin in poorly differentiated tumors and to distinguish carcinomas from mesenchymal malignancies.

In clinical research, EpCAM expression is observed in a broad range of carcinomas including colorectal, breast, prostate, pancreatic, and ovarian cancers. Overexpression of CD326 has been associated with tumor progression and metastatic potential in certain malignancies. Due to its cell surface localization, EpCAM has also been explored as a therapeutic target and as a marker for circulating tumor cell detection. CD326 antibody is therefore valuable in studies of tumor biology, cancer diagnostics, and epithelial lineage confirmation.

Beyond oncology, Epithelial cell adhesion molecule participates in signaling pathways regulating cell proliferation and differentiation. Proteolytic cleavage of EpCAM can release an intracellular fragment that translocates to the nucleus and influences gene transcription. CD326 Antibody provides a reliable tool for assessing epithelial differentiation patterns and membrane-associated expression in normal and neoplastic tissues.

Application Notes

1. Optimal dilution of the recombinant CD326/Epithelial cell adhesion molecule antibody should be determined by the researcher.

2. This recombinant CD326/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/Epithelial cell adhesion molecule antibody.

Storage

Recombinant CD326/Epithelial cell adhesion molecule antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.