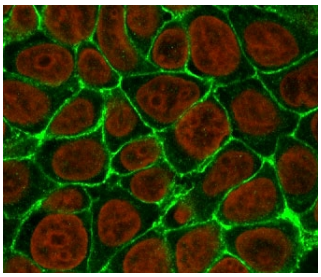
EpCAM Antibody [clone EPM17-1] (V7010)

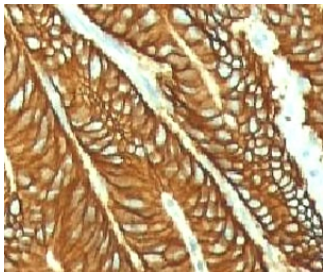
Catalog No.	Formulation	Size
V7010-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7010-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7010SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7010IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

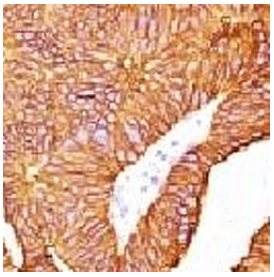
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	EPM17-1
Purity	Protein G affinity chromatography
UniProt	P16422
Localization	Cell surface, cytoplasmic
Applications	Flow Cytometry : 1-2ug/million cells in 0.1ml Western Blot : 2-4ug/ml Immunofluorescence : 1-2 ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT (1) Prediluted IHC Only Format : incubate for 30 min at RT (2)
Limitations	This EpCAM antibody is available for research use only.



Immunofluorescent staining of human MCF7 cells with EpCAM antibody (clone EPM17-1, green) and Reddot nuclear stain (red).



IHC testing of FFPE human colon carcinoma and EpCAM antibody (EPM17-1). FFPE testing requires sections to be boiled in pH 9 10mM Tris with 1mM EDTA for 10-20 minutes, followed by cooling at RT for 20 minutes, prior to staining.



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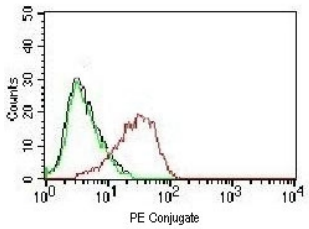
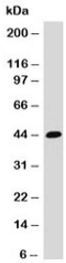


Flow cytometry testing of human MCF-7 cells using PE conjugated EpCAM antibody (red) and isotype control (green).



Western blot testing of HCT116 cell lysate and EpCAM antibody (EPM17-1). Expected molecular weight: ~35 kDa (unmodified), 40-43 kDa (glycosylated).

Description

EpCAM Antibody recognizes Epithelial Cell Adhesion Molecule (EPCAM), also known as EpCAM, CD326, and TACSTD1, a transmembrane glycoprotein expressed on the surface of many epithelial cells. EPCAM functions in cell-cell adhesion, tissue organization, epithelial integrity, and intracellular signaling, making it one of the most widely used markers for identification of epithelial lineage cells. Due to its abundant expression in normal epithelial tissues and many epithelial-derived tumors, EpCAM is extensively utilized in cancer research, stem cell biology, developmental biology, and studies of epithelial differentiation. Its cell surface localization further makes EPCAM particularly useful for immunohistochemistry, immunofluorescence, western blotting, flow cytometry, and cell sorting applications.

EpCAM is localized primarily to the plasma membrane, where it mediates homophilic cell-cell interactions and contributes to maintenance of epithelial architecture. In addition to its adhesive properties, EPCAM participates in signaling pathways that regulate cellular proliferation, differentiation, migration, and survival. These biological activities allow EpCAM to influence tissue development and epithelial homeostasis beyond its structural role. Because expression is largely restricted to epithelial cell populations, EPCAM serves as a valuable marker for distinguishing epithelial cells from stromal, mesenchymal, and hematopoietic cell types in complex biological samples.

EpCAM has become particularly important in cancer biology because it is frequently expressed by carcinomas arising from epithelial tissues. Researchers commonly use EPCAM antibodies to identify epithelial tumor cells, evaluate epithelial differentiation status, characterize tumor heterogeneity, and isolate circulating tumor cells from blood samples. The protein is widely employed in studies involving colorectal, breast, prostate, lung, pancreatic, ovarian, and other epithelial malignancies. As a result, EpCAM has become one of the most recognized epithelial markers in translational cancer research and tumor pathology investigations.

Beyond oncology applications, EPCAM plays important roles in embryonic development, epithelial regeneration, tissue repair, and stem cell biology. Expression is often associated with epithelial progenitor populations and actively proliferating epithelial compartments. Researchers therefore utilize EPCAM as a marker for epithelial lineage tracing, organoid development, regenerative medicine studies, and investigations of tissue homeostasis. The protein continues to serve as an important tool for understanding epithelial biology across a wide range of normal and pathological contexts.

At NSJ Bioreagents, we provide highly validated antibodies for cancer research, stem cell biology, developmental biology, and cell biology applications. EpCAM Antibody is useful for investigating epithelial cell populations, epithelial-derived tumors, tissue organization, cellular differentiation, and cell surface marker expression. Continued research into EPCAM is improving our understanding of epithelial tissue formation, maintenance, regeneration, and disease progression.

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.

Application Notes

Titering of the EpCAM antibody may be required for optimal performance.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Recombinant human protein was used as the immunogen for the EpCAM antibody.

Storage

Store the EpCAM antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).