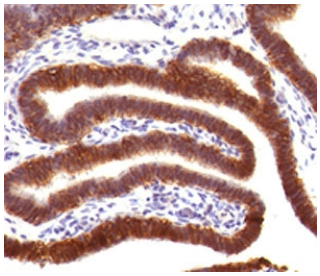
EpCAM Antibody / Extracellular domain [clone EPM17-4] (V7228)

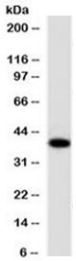
Catalog No.	Formulation	Size
V7228-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7228-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7228SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

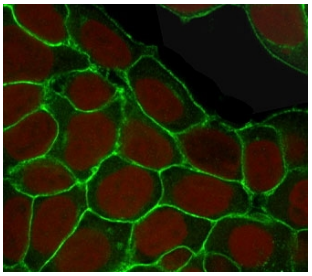
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	EPM17-4
Purity	Protein G affinity chromatography
UniProt	P16422
Localization	Cell surface, cytoplasmic
Applications	Western blot: 1-2ug/ml Immunofluorescence: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This EpCAM antibody is available for research use only.



IHC testing of FFPE human fallopian tube with EpCAM antibody (clone EPM17-4). Staining of FFPE tissue requires boiling sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.



Western blot testing of human lung lysate with EpCAM antibody (clone EPM17-4). Expected molecular weight: ~35 kDa (unmodified), 40-43 kDa (glycosylated).



Immunofluorescent staining of human MCF7 cells with EpCAM antibody (clone EPM17-4, green) and Reddot nuclear stain (red).

Description

EpCAM Antibody / Extracellular Domain recognizes Epithelial Cell Adhesion Molecule (EPCAM), also known as EpCAM, CD326, and TACSTD1, through an epitope located within the extracellular region of the protein. EPCAM is a type I transmembrane glycoprotein expressed on the surface of many epithelial cells, where it functions in cell-cell adhesion, tissue organization, epithelial integrity, and signal transduction. Because the extracellular domain is exposed on the cell surface, antibodies directed against this region are particularly useful for detecting native EPCAM expression on intact cells. Extracellular domain-specific EpCAM antibodies are widely used in flow cytometry, immunofluorescence, cell sorting, and studies requiring recognition of surface-accessible protein epitopes.

The extracellular region of EPCAM mediates homophilic interactions between adjacent epithelial cells and contributes to maintenance of epithelial architecture. Through these interactions, EPCAM influences cellular communication, tissue organization, and epithelial barrier function. Antibodies directed against the extracellular domain can provide reliable detection of membrane-localized EPCAM while preserving the biological relevance of native protein expression patterns. This makes extracellular domain-specific reagents valuable tools for identifying epithelial cell populations and evaluating cell surface marker expression in both normal and diseased tissues.

Because EPCAM is highly expressed by many epithelial-derived malignancies, extracellular domain antibodies are frequently employed in cancer research and translational studies. Cell surface detection of EPCAM enables characterization of carcinoma cells, epithelial tumor populations, and circulating tumor cells without requiring cell permeabilization. Researchers commonly use extracellular domain-targeting EpCAM antibodies to identify, isolate, and analyze epithelial tumor cells from complex biological samples. These applications have made EPCAM one of the most widely utilized cell surface markers in oncology research and epithelial tumor biology.

Extracellular domain-specific EPCAM antibodies are also valuable in stem cell research, regenerative medicine, and developmental biology. EPCAM expression is frequently associated with epithelial progenitor populations and actively proliferating epithelial compartments. Detection of surface-accessible EPCAM allows investigators to monitor epithelial differentiation, evaluate organoid cultures, isolate epithelial stem cell populations, and study epithelial tissue regeneration. The accessibility of the extracellular domain makes these antibodies particularly well suited for live-cell applications and cell population analysis.

At NSJ Bioreagents, we provide highly validated antibodies for cancer research, stem cell biology, developmental biology, and cell biology applications. EpCAM Antibody / Extracellular Domain is useful for investigating epithelial cell populations, epithelial-derived tumors, circulating tumor cells, epithelial differentiation, and cell surface marker expression. Continued research into EPCAM is advancing our understanding of epithelial biology, tissue organization, regenerative processes,

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

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the EpCAM antibody to be titered up or down for optimal performance.

Immunogen

Human recombinant partial protein (extracellular portion) was used as the immunogen for this EpCAM antibody.

Storage

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

References (2)

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