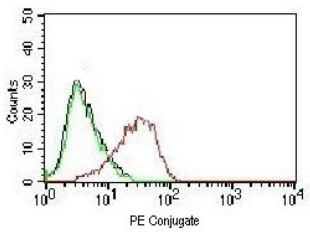
EpCAM Antibody PE Conjugate [clone EPM17-1] (V7010PE)

Catalog No.	Formulation	Size
V7010PE-100T	500 ul at 0.1 mg/ml with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 Tests

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	PE Conjugate
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	EPM17-1
Purity	Protein G affinity chromatography
UniProt	P16422
Localization	Cell surface
Applications	Flow Cytometry : 5ul/test/10e6 cells in 0.1ml Immunofluorescence : 1:50-1:100
Limitations	This EpCAM antibody is available for research use only.



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

Description

EpCAM Antibody PE Conjugate 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. Because EPCAM is abundantly expressed on normal epithelial tissues

and many epithelial-derived tumors, it is extensively utilized in cancer research, stem cell biology, developmental biology, and studies of epithelial differentiation. Conjugation to phycoerythrin (PE) enables direct fluorescent detection of EPCAM-expressing cells without the need for a secondary antibody, making this reagent particularly useful for flow cytometry and cell sorting applications.

EpCAM is localized primarily to the plasma membrane, where it mediates cell-cell interactions and contributes to maintenance of epithelial tissue architecture. In addition to its adhesive functions, EPCAM regulates signaling pathways involved in 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 mesenchymal, stromal, and hematopoietic cell types in heterogeneous samples.

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

Beyond cancer 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 ability to directly detect EPCAM-positive cells using a PE-conjugated antibody facilitates rapid identification and characterization of epithelial populations by flow cytometry.

At NSJ Bioreagents, we provide highly validated antibodies and conjugates for cancer research, stem cell biology, developmental biology, and cell biology applications. EpCAM Antibody PE Conjugate is useful for direct fluorescent detection of EPCAM-positive epithelial cells, epithelial-derived tumor cells, stem cell populations, and circulating tumor cells. 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.

Immunogen

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

Storage

Store the EpCAM antibody at 2-8oC. Conjugate is light sensitive, store in the dark.