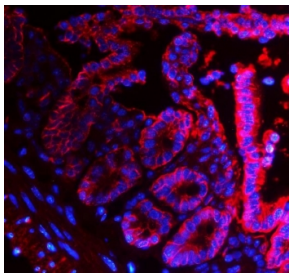
Epcam Antibody / Mouse and Rat Reactive Antibody (RQ6173)

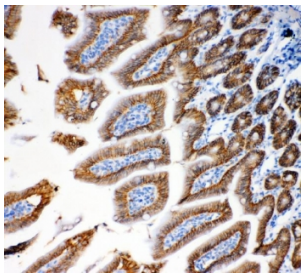
Catalog No.	Formulation	Size
RQ6173	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

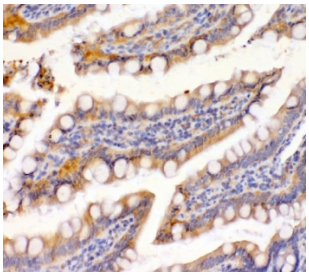
Availability	1-3 business days
Species Reactivity	Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.0125% sodium azide
UniProt	Q99JW5
Applications	Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence: 5ug/ml Direct ELISA: 0.1-0.5ug/ml
Limitations	This Epcam Antibody / Mouse and Rat Reactive Antibody is available for research use only.



Epcam Antibody Mouse Intestine IF. Immunofluorescent staining of FFPE mouse intestine tissue using Epcam Antibody demonstrates strong red fluorescence localized predominantly to the epithelial lining of intestinal villi and crypt structures. The staining pattern is consistent with expression of Epithelial Cell Adhesion Molecule (EPCAM/CD326), a transmembrane glycoprotein involved in epithelial cell adhesion, maintenance of tissue architecture, and regulation of epithelial differentiation. Prominent membrane-associated fluorescence outlines the intestinal epithelial compartment and highlights the organized cellular structure of the mucosal lining. Nuclei are counterstained with DAPI (blue). The observed staining supports the use of Epcam as a marker for epithelial cell identification, intestinal epithelial biology, and studies of tissue organization and epithelial homeostasis in mouse tissues. HIER: steam tissue sections in pH 8 EDTA buffer for 20 minutes prior to staining.



Epcam Antibody Mouse Intestine IHC. Immunohistochemistry staining of FFPE mouse intestine tissue using Epcam Antibody demonstrates strong membranous HRP-DAB brown staining throughout the epithelial lining of intestinal villi and crypt structures. The staining pattern is consistent with expression of Epithelial Cell Adhesion Molecule (EPCAM/CD326), a transmembrane glycoprotein involved in epithelial cell adhesion, maintenance of tissue architecture, and regulation of epithelial differentiation. Prominent membrane-associated staining outlines individual enterocytes and highlights the highly organized epithelial compartment of the intestinal mucosa. The observed immunoreactivity is consistent with the established expression of EPCAM in gastrointestinal epithelial tissues and supports the use of Epcam as a marker for epithelial cell identification, intestinal biology studies, and investigations of epithelial tissue homeostasis in mouse models. HIER: boil tissue sections in pH 8 EDTA buffer for 20 minutes and allow to cool before testing.



Epcam Antibody Rat Intestine IHC. Immunohistochemistry staining of FFPE rat intestine tissue using Epcam Antibody demonstrates distinct membranous HRP-DAB brown staining throughout the intestinal epithelial lining, including absorptive enterocytes and crypt-associated epithelial cells. The staining pattern is consistent with expression of Epithelial Cell Adhesion Molecule (EPCAM/CD326), a cell surface glycoprotein that mediates epithelial cell adhesion and contributes to maintenance of epithelial architecture and tissue integrity. Prominent membrane localization highlights epithelial cell boundaries along the mucosal surface and is characteristic of EPCAM expression in gastrointestinal epithelial tissues. The observed immunoreactivity supports the use of Epcam as a marker for epithelial cell identification, intestinal epithelial differentiation, and studies of epithelial biology in rat models. HIER: boil tissue sections in pH 8 EDTA buffer for 20 minutes and allow to cool before testing.

Description

Epcam Antibody / Mouse and Rat Reactive Antibody recognizes Epithelial Cell Adhesion Molecule (EPCAM), also known as EpCAM, CD326, and TACSTD1, a transmembrane glycoprotein expressed on the surface of epithelial cells. EPCAM functions in cell-cell adhesion, epithelial integrity, tissue organization, and intracellular signaling, making it one of the most widely utilized markers for identification of epithelial cell populations. Because EPCAM is broadly expressed throughout epithelial tissues of multiple species, antibodies with demonstrated mouse and rat reactivity are valuable tools for studies of tissue development, epithelial differentiation, regenerative biology, and disease modeling in rodent systems.

EPCAM is localized primarily to the plasma membrane, where it contributes to maintenance of epithelial architecture through interactions between neighboring cells. In addition to its adhesive role, EPCAM participates in signaling pathways that regulate cellular proliferation, migration, differentiation, and survival. These biological activities allow EPCAM to influence epithelial homeostasis and tissue organization beyond its structural functions. As a result, EPCAM has become a widely accepted marker for distinguishing epithelial cells from mesenchymal, stromal, and hematopoietic populations in both normal and diseased tissues.

Mouse and rat models are extensively used to investigate epithelial biology, gastrointestinal physiology, mammary gland development, tissue regeneration, inflammatory disease, and cancer progression. Reliable detection of EPCAM in rodent tissues enables researchers to identify epithelial compartments, evaluate tissue architecture, and characterize epithelial responses to experimental treatments or genetic modifications. Antibodies validated in mouse and rat tissues provide particular value for translational studies that seek to connect findings from animal models to human epithelial biology.

EPCAM is also widely utilized in studies of epithelial-derived tumors. Expression is frequently retained in carcinomas originating from epithelial tissues, allowing investigators to identify tumor cells, assess epithelial differentiation, and evaluate epithelial lineage characteristics. In rodent disease models, EPCAM serves as a useful marker for monitoring epithelial cell populations during tumor development, tissue injury, repair processes, and regenerative responses. These

applications have established EPCAM as an important research tool in both basic and translational investigations.

At NSJ Bioreagents, we provide highly validated antibodies for cancer research, developmental biology, regenerative medicine, and cell biology applications. Epcam Antibody / Mouse and Rat Reactive Antibody is useful for investigating epithelial cell populations, tissue organization, epithelial differentiation, and epithelial-derived disease models in rodent systems. Continued research into EPCAM is improving our understanding of epithelial tissue function, regeneration, and disease progression across multiple biological systems.

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

Optimal dilution of the Epcam Antibody / Mouse and Rat Reactive Antibody should be determined by the researcher.

Immunogen

A mouse recombinant partial protein (amino acids E147-N189) was used as the immunogen for the Epcam antibody.

Storage

After reconstitution, the Epcam antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

EPCAM Antibody, EpCAM Antibody, CD326 Antibody, Epithelial Cell Adhesion Molecule Antibody, TACSTD1 Antibody, Epithelial Marker Antibody

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