

## Anti-EpCAM (Extracellular region) Antibody

Catalog # AN1773

### Specification

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#### Anti-EpCAM (Extracellular region) Antibody - Product Information

Application	WB, IHC
Primary Accession	<a href="#">P16422</a>
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG1
Calculated MW	34932

#### Anti-EpCAM (Extracellular region) Antibody - Additional Information

Gene ID 4072

##### Other Names

GA733-2, M1S2, M4S1, MIC18, TACSTD1, TROP1, Epitelial glycoprotein, EGP, KS 1/4 antigen, KSA, EGP314, CD326, EpCAM

##### Target/Specificity

Epithelial Cell Adhesion Molecule (EpCAM) is a signal type I transmembrane glycoprotein that has an extracellular domain with one thyroglobulin type-1 domain and a short cytoplasmic domain. EpCAM is found on the surface of adenocarcinoma, but not on mesodermal or neural cell membranes. The EpCAM molecule has been shown to function as a homophilic Ca<sup>2+</sup> independent adhesion molecule. It may act as a physical homophilic interaction molecule between intestinal epithelial cells (IECs) and intraepithelial lymphocytes (IELs) at the mucosal epithelium. Defects in EpCAM cause hereditary non-polyposis colorectal cancer type 8 (HNPCC8) and diarrhea type 5 (DIAR5). EpCAM plays a role in embryonic stem cell proliferation and differentiation; it up-regulates the expression of FABP5, MYC, and Cyclin A & Cyclin E. It is highly and selectively expressed by undifferentiated embryonic stem cells and in many types of epithelial carcinomas.

##### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

##### Precautions

Anti-EpCAM (Extracellular region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

##### Shipping

Blue Ice

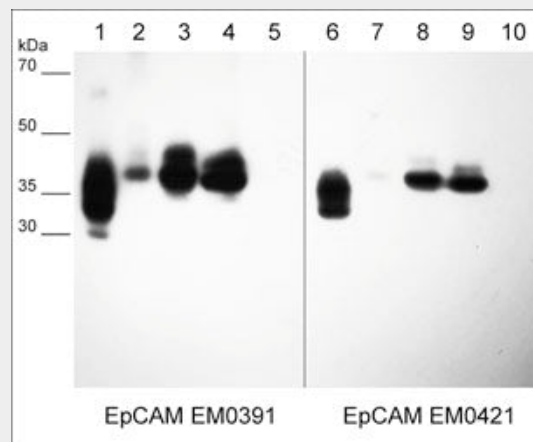
#### Anti-EpCAM (Extracellular region) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

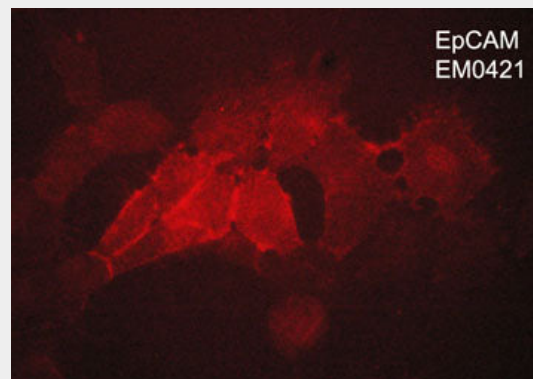
- [Western Blot](#)
- [Blocking Peptides](#)

- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

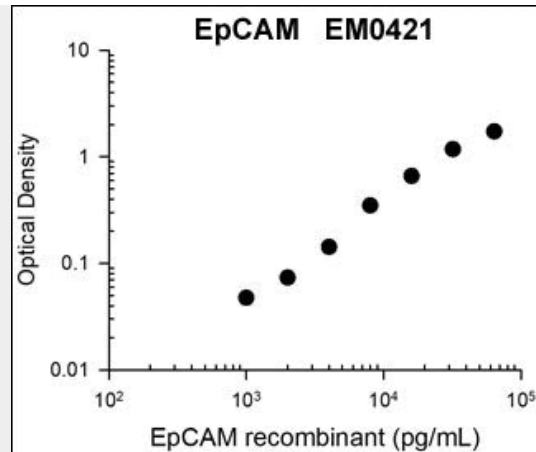
### Anti-EpCAM (Extracellular region) Antibody - Images



Western blot of native lysates including human EpCAM extracellular region (lane 1 & 6), MCF7 breast carcinoma (lane 2 & 7), A431 skin adenocarcinoma (lane 3 & 8), NCI-H1915 lung carcinoma (lane 4 & 9), and NCI-H446 lung carcinoma (lane 5 & 10). The blot was probed with mouse monoclonal anti-EpCAM (EM0391) (lanes 1-5) and mouse monoclonal anti-EpCAM (EM0421) (lanes 6-10) at 1:1000 each.



Immunocytochemical labeling of EpCAM in aldehyde fixed human NCI-H1915 lung carcinoma cells. The cells were labeled with mouse monoclonal anti-EpCAM (EM0421). The antibody was detected using goat anti-mouse Ig:DyLight® 594.



Representative Standard Curve using mouse monoclonal anti-EpCAM (EM0421) for ELISA capture of human recombinant EpCAM extracellular region with His-tag. Capture was detected by using an anti-His-tag antibody followed by appropriate secondary antibody conjugated to HRP.

### **Anti-EpCAM (Extracellular region) Antibody - Background**

Epithelial Cell Adhesion Molecule (EpCAM) is a signal type I transmembrane glycoprotein that has an extracellular domain with one thyroglobulin type-1 domain and a short cytoplasmic domain. EpCAM is found on the surface of adenocarcinoma, but not on mesodermal or neural cell membranes. The EpCAM molecule has been shown to function as a homophilic Ca<sup>2+</sup> independent adhesion molecule. It may act as a physical homophilic interaction molecule between intestinal epithelial cells (IECs) and intraepithelial lymphocytes (IELs) at the mucosal epithelium. Defects in EpCAM cause hereditary non-polyposis colorectal cancer type 8 (HNPCC8) and diarrhea type 5 (DIAR5). EpCAM plays a role in embryonic stem cell proliferation and differentiation; it up-regulates the expression of FABP5, MYC, and Cyclin A & Cyclin E. It is highly and selectively expressed by undifferentiated embryonic stem cells and in many types of epithelial carcinomas.