

# Anti-EpCAM (Extracellular region) Antibody

**Catalog # AN1773** 

#### **Specification**

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

Application WB, IHC
Primary Accession P16422
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 Ca2+ 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.

#### **Dilution**

WB~~1:1000 IHC~~1:100~500

#### **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

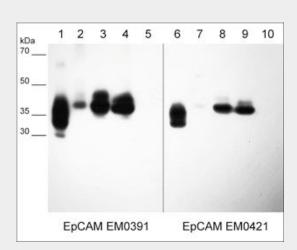
#### Anti-EpCAM (Extracellular region) Antibody - Protocols



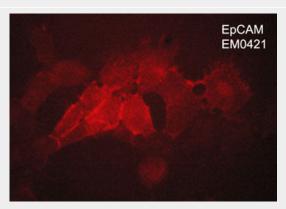
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

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

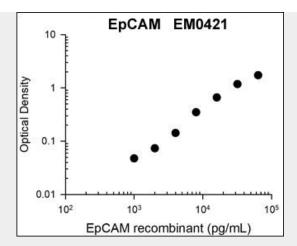


Western blot of native lysates including human EpCAM extracellular region (lane 1 & 6), MCF7 breast carcinoma (lane 2 & 7), A431 skin adenocarcinoma (lane 3 & 8), NCI-H1915 lung carcinoma (lane 4 & 9), and NCI-H446 lung carcinoma (lane 5 & 10). The blot was probed with mouse monoclonal anti-EpCAM (EM0391) (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 lg: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 Ca2+ 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.