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Anti-EpCAM (Extracellular region) Antibody

Catalog # AN1772

Product Information

Application	WB, ICC, IP
Primary Accession	P16422
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG1
Clone Names	M039
Calculated MW	34932

Additional Information

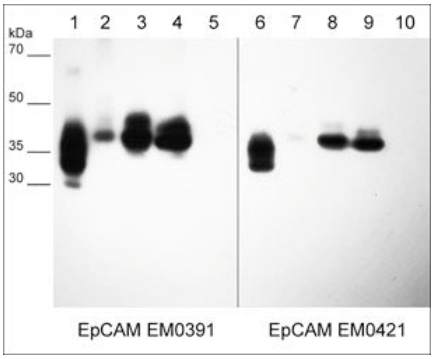
Gene ID	4072
Other Names	GA733-2, M1S2, M4S1, MIC18, TACSTD1, TROP1, Epitelial glycoprotein, EGP, KS 1/4 antigen, KSA, EGP314, CD326, EpCAM
Target/Specificity	Epithelial Cell Adhesion Molecule (EpCAM) is a signal type I transmembrane glycoprotein that has an extracellular domain with one thyroglobulin 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 ICC~~N/A IP~~N/A
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

Background

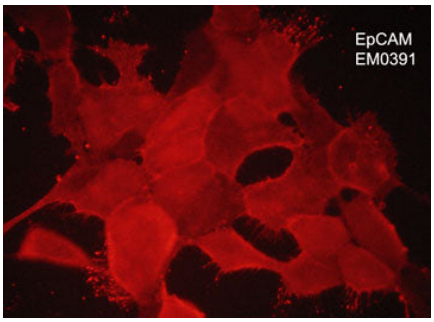
Epithelial Cell Adhesion Molecule (EpCAM) is a signal type I transmembrane glycoprotein that has an extracellular domain with one thyroglobulin type-1 domain and a short cytoplasmic domain. EpCAM is found

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.

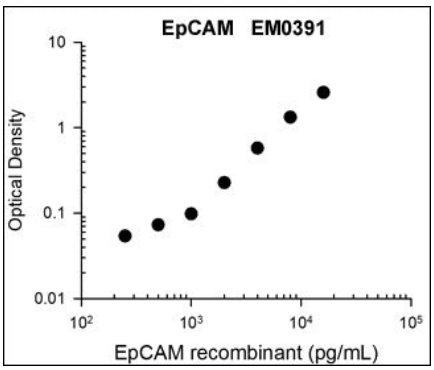
Images



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 (AN1772) (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 (AN1772). The antibody was detected using goat anti-mouse Ig:DyLight® 594.



Representative Standard Curve using mouse monoclonal anti-EpCAM (AN1772) 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.