10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

EPCAM Antibody
Mouse Monoclonal Antibody (Mab)
Catalog # AM2098a

Specification

EPCAM Antibody - Product Information

Application	**WB, IHC-P-Leica,E**
Primary Accession	P16422
Other Accession	NP_002345.2
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Antigen Region	**59-86**

EPCAM Antibody - Additional Information

Gene ID 4072

Other Names
Epithelial cell adhesion molecule, Ep-CAM, Adenocarcinoma-associated antigen, Cell surface glycoprotein Trop-1, Epithelial cell surface antigen, Epithelial glycoprotein, EGP, Epithelial glycoprotein 314, EGP314, hEGP314, KS 1/4 antigen, KSA, Major gastrointestinal tumor-associated protein GA733-2, Tumor-associated calcium signal transducer 1, CD326, EPCAM, GA733-2, M1S2, M4S1, MIC18, TACSTD1, TROP1

Target/Specificity
This EPCAM antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 59-86 amino acids from human EPCAM.

Dilution
WB~~1:8000
IHC-P-Leica~~1:1000

Format
Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

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

Precautions
EPCAM Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

EPCAM Antibody - Protein Information

Name EPCAM

Synonyms GA733-2, M1S2, M4S1, MIC18, TACSTD1, TRO

Function May act as a physical homophilic interaction molecule between intestinal epithelial cells (IECs) and intraepithelial lymphocytes (IELs) at the mucosal epithelium for providing immunological barrier as a first line of defense against mucosal infection. Plays a role in embryonic stem cells proliferation and differentiation. Up-regulates the expression of FABP5, MYC and cyclins A and E.

Cellular Location
Lateral cell membrane; Single-pass type I membrane protein. Cell junction, tight junction. Note=Colocalizes with CLDN7 at the lateral cell membrane and tight junction

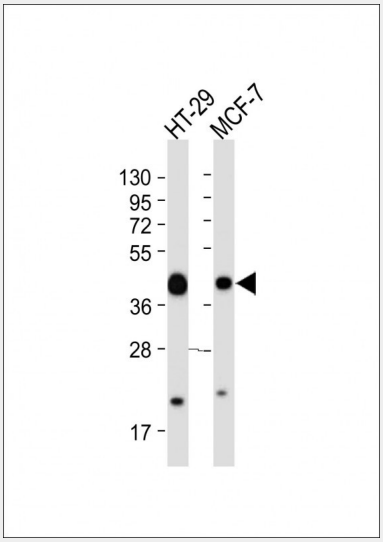
Tissue Location
Highly and selectively expressed by undifferentiated rather than differentiated embryonic stem cells (ESC) Levels rapidly diminish as soon as ESC's differentiate (at protein levels). Expressed in almost all epithelial cell membranes but not on mesodermal or neural cell membranes. Found on the surface of adenocarcinoma.

EPCAM 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 Cytomety
- Cell Culture

EPCAM Antibody - Images



All lanes : Anti-EPCAM Antibody (N-term) at 1:8000 dilution Lane 1: HT-29 whole cell lysate Lane 2: MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 39 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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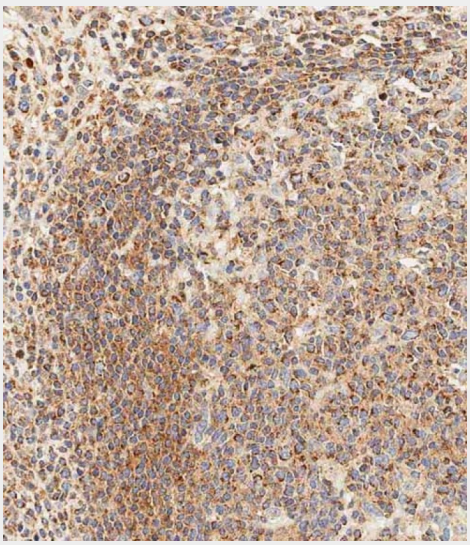

Immunohistochemical analysis of paraffin-embedded human appendix tissue using AM2098a performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature; antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody (1:1000) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

EPCAM Antibody - Background

This gene encodes a carcinoma-associated antigen and is a member of a family that includes at least two type I membrane proteins. This antigen is expressed on most normal epithelial cells and gastrointestinal carcinomas and functions as a homotypic calcium-independent cell adhesion molecule. The antigen is being used as a target for immunotherapy treatment of human carcinomas. Mutations in this gene result in congenital tufting enteropathy.

EPCAM Antibody - References

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Jiang, L., et al. Breast Cancer Res. Treat. (2010) In press :
Lugli, A., et al. Br. J. Cancer 103(3):382-390(2010)
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Ren, G., et al. Zhonghua Zhong Liu Za Zhi 31(11):841-844(2009)