

EPCAM Antibody

Mouse Monoclonal Antibody (Mab)

Catalog # AM2098a

Product Information

Application	WB, IHC-P-Leica, E
Primary Accession	P16422
Other Accession	NP_002345.2
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Names	463CT25.1.1
Calculated MW	34932
Antigen Region	59-86

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~~1:500~8000 IHC-P-Leica~~1:1000 E~~Use at an assay dependent concentration.
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.

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.

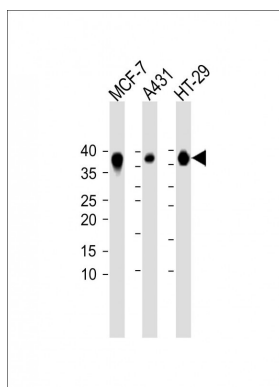
Background

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.

References

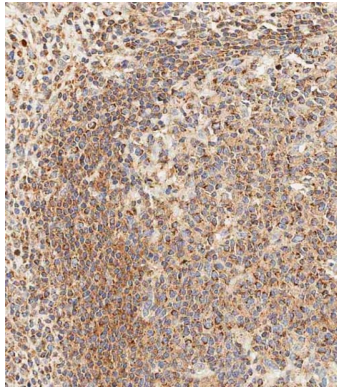
- Kimura, O., et al. *Cancer Sci.* 101(10):2145-2155(2010)
 Jiang, L., et al. *Breast Cancer Res. Treat.* (2010) In press :
 Lugli, A., et al. *Br. J. Cancer* 103(3):382-390(2010)
 Johnatty, S.E., et al. *PLoS Genet.* 6 (7), E1001016 (2010) :
 Ren, G., et al. *Zhonghua Zhong Liu Za Zhi* 31(11):841-844(2009)

Images



All lanes: Anti-EPCAM Antibody (N-term) at 1:1000 dilution
 Lane 1: MCF-7 whole cell lysate
 Lane 2: A431 whole cell lysate
 Lane 3: HT-29 whole cell lysate
 Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Mouse IgG, (H+L), Peroxidase conjugated (ASP1613) at 1/8000 dilution. Observed band size: 39 KDa
 Blocking/Dilution buffer: 5% NFDm/TBST.

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.