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Ep-CAM / CD326 (Epithelial Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone EGP40/837]
Catalog # AH11774

Product Information

Application	WB, IHC, IF, FC
Primary Accession	P16422
Other Accession	4072, 542050
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	EGP40/837
Calculated MW	34932

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
Application Note	WB~~1:1000 IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Ep-CAM / CD326 (Epithelial Marker) Antibody - With BSA and Azide 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

EGP40 is a 40-43kDa transmembrane epithelial glycoprotein, also identified as epithelial specific antigen (ESA), or epithelial cellular adhesion molecule (Ep-CAM). It is expressed on baso-lateral cell surface in most simple epithelia and a vast majority of carcinomas with the exception of adult squamous epithelium, hepatocytes and gastric epithelial cells. This antibody has been used to distinguish adenocarcinoma from pleural mesothelioma and hepatocellular carcinoma. This antibody is also useful in distinguishing serous carcinomas of the ovary from mesothelioma.

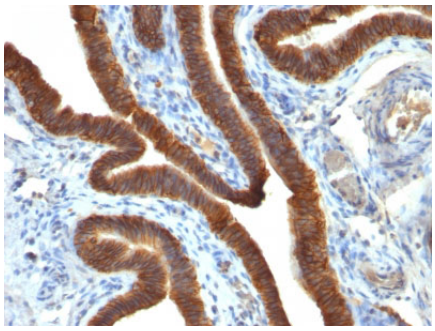
References

Bjork, P., Jonsson, U., Svedberg, H., Larsson, K., Lind, P., Dillner, J., Hedlund, G., Dohlsten, M. and Kalland, T. 1993. Isolation, partial characterization, and molecular cloning of a human colon adenocarcinoma cell-surface glyco- protein recognized by the C215 mouse monoclonal antibody. J. Biol. Chem. 268: 24232-24241. |

Images

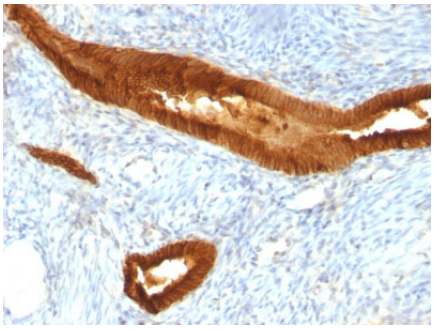


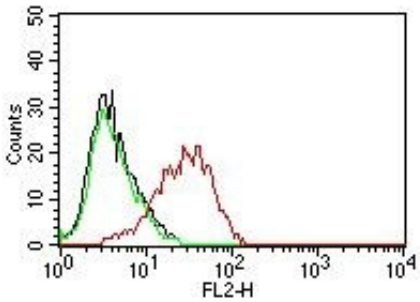
Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with Ep-CAM Monoclonal Antibody (EGP40/837).



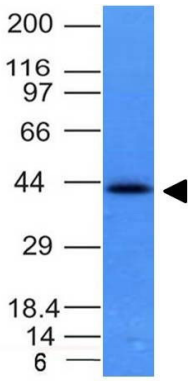
Formalin-fixed, paraffin-embedded human Ovarian Carcinoma stained with Ep-CAM Monoclonal Antibody (EGP40/837).

Formalin-fixed, paraffin-embedded human Endometrial Carcinoma stained with Ep-CAM Monoclonal Antibody (EGP40/837).

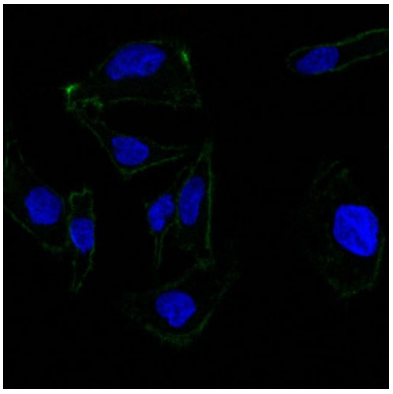




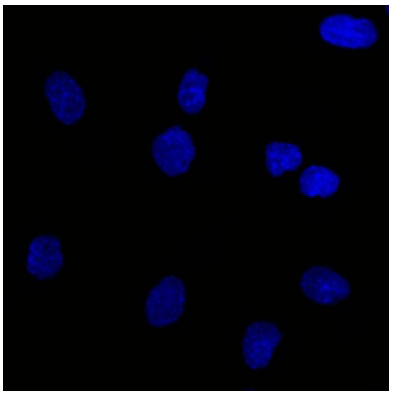
Flow Cytometry of human MCF-7 Cells. Black: Cells alone; Green: Isotype Control; Red: PE-labeled Ep-CAM Monoclonal Antibody (EGP40/837).



Western Blot of HCT116 Cell Lysate using Ep-CAM Monoclonal Antibody (EGP40/837).



Confocal Immunofluorescent analysis of SK-OV-3 cells using AF488-labeled EpCAM Monoclonal Antibody (EGP40/837) (Green). DAPI was used to stain the cell nuclei (blue).



Confocal Immunofluorescent analysis of SK-OV-3 cells using AF488-labeled Isotype Control Monoclonal Antibody (IgG1) (Green).DAPI was used to stain the cell nuclei (blue). (Negative Control)

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