

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

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

## **Specification**

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

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality

Isotype Calculated MW WB, IHC, IF, FC P16422 4072, 542050

Human Mouse

Monoclonal Mouse / IgG1, kappa

40-43kDa KDa

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

- <span class ="dilution\_WB">WB~~1:1000</span><br \><span class</pre>
- ="dilution\_IHC">IHC~~1:100~500</span><br \><span class
- ="dilution IF">IF $\sim$ 1:50 $\sim$ 200</span><br/>or \><span class ="dilution FC">FC $\sim$ 1:10 $\sim$ 50</span>

#### 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.

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

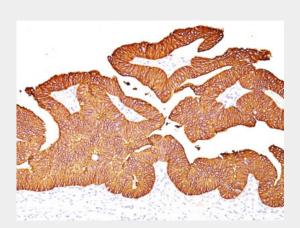
Highly and selectively expressed by undifferentiated rather than differentiated embryonic stem cells (ESC) Levels rapidly diminish as soon as ESC's differentiate (at protein levels). Expressed in almost all epithelial cell membranes but not on mesodermal or neural cell membranes. Found on the surface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

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

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

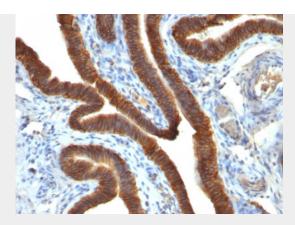
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

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



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

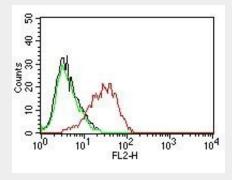




Formalin-fixed, paraffin-embedded human Ovarian Carcinoma stained with Ep-CAM Monoclonal Antibody (EGP40/837).

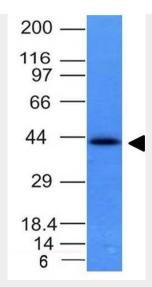


Formalin-fixed, paraffin-embedded human Endometrial Carcinoma stained with Ep-CAM Monoclonal Antibody (EGP40/837).

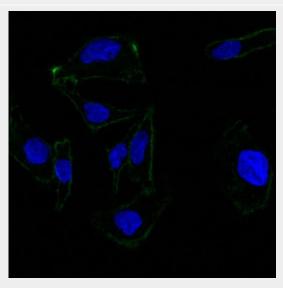


Flow Cytometry of human MCF-7 Cells. Black: Cells alone; Green: Isotype Control; Red: PE-labeled Ep-CAM Monoclonal Antibody (EGP40/837).

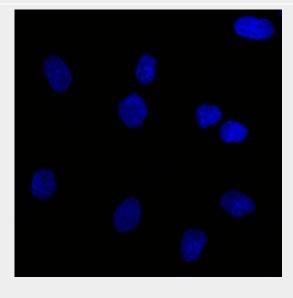




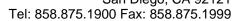
Western Blot of HCT116 Cell Lysate using Ep-CAM Monoclonal Antibody (EGP40/837).



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)

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

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