

Anti-EPCAM Picoband Antibody
Catalog # ABO11677**Specification****Anti-EPCAM Picoband Antibody - Product Information**

Application	WB, IHC-P, IHC-F, FC, ICC, E
Primary Accession	P16422
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Epithelial cell adhesion molecule(EPCAM) detection. Tested with WB, IHC-P, IHC-F, ICC, ELISA, FCM in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-EPCAM Picoband 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

Calculated MW

34932 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, By Heat
Immunohistochemistry(Frozen Section), 0.5-1 µg/ml
Immunocytochemistry, 0.5-1 µg/ml
ELISA, 0.1-0.5 µg/ml
Western blot, 0.1-0.5 µg/ml
Flow Cytometry, 1-3¹/₄g/1x10⁶ cells

Subcellular Localization

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

Tissue Specificity

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. .

Protein Name

Epithelial cell adhesion molecule

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human EPCAM (147-189aa ELKHKAREKPYDSKSLRTALQKEITTRYQLDPKFITSILYENN), different from the related mouse sequence by fifteen amino acids, and from the related rat sequence by sixteen amino acids.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-EPCAM Picoband 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.

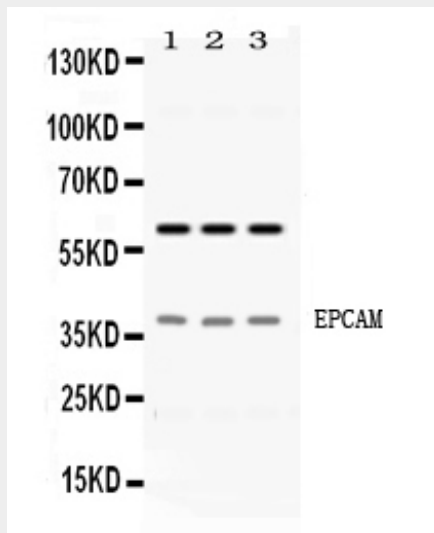
Anti-EPCAM Picoband Antibody - Protocols

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

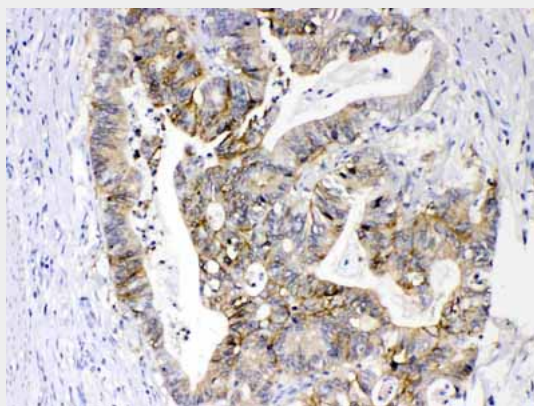
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

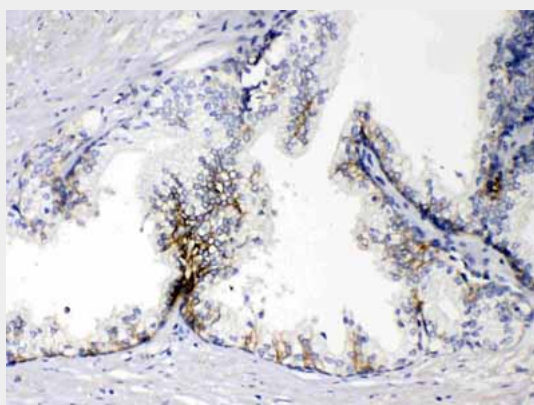
Anti-EPCAM Picoband Antibody - Images



Western blot analysis of EPCAM expression in HELA whole cell lysates (lane 1), A549 whole cell lysates (lane 2) and PANC-1 whole cell lysates (lane 3). EPCAM at 40KD was detected using rabbit anti- EPCAM Antigen Affinity purified polyclonal antibody (Catalog # ABO11677) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .



EPCAM was detected in paraffin-embedded sections of human intestinal cancer tissues using rabbit anti- EPCAM Antigen Affinity purified polyclonal antibody (Catalog # ABO11677) at 1 µg/mL. The immunohistochemical section was developed using SABC method .



EPCAM was detected in paraffin-embedded sections of human prostatic cancer tissues using rabbit anti- EPCAM Antigen Affinity purified polyclonal antibody (Catalog # ABO11677) at 1 μ g/mL. The immunohistochemical section was developed using SABC method .

Anti-EPCAM Picoband Antibody - Background

Epithelial cell adhesion molecule (EpCAM) is a transmembrane glycoprotein mediating Ca^{2+} -independent homotypic cell-cell adhesion in epithelia. 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.