

Anti-EpCAM Antibody [3-E1-E2]

EM1111



Product Type:	Mouse monoclonal IgM, primary antibodies
Species reactivity:	Human, Mouse
Applications:	WB, IF-Cell, IHC-P
Molecular Wt:	Predicted band size: 35 kDa
Clone number:	3-E1-E2

Description: Epithelial cell adhesion molecule (EpCAM) is a transmembrane glycoprotein mediating Ca²⁺-independent homotypic cell-cell adhesion in epithelia. EpCAM is also involved in cell signaling, migration, proliferation, and differentiation. Additionally, EpCAM has oncogenic potential via its capacity to upregulate c-myc, e-fabp, and cyclins A & E. Since EpCAM is expressed exclusively in epithelia and epithelial-derived neoplasms, EpCAM can be used as diagnostic marker for various cancers. It appears to play a role in tumorigenesis and metastasis of carcinomas, so it can also act as a potential prognostic marker and as a potential target for immunotherapeutic strategies. Mutations in EpCAM have also been associated with congenital tufting enteropathy which causes intractable diarrhea in newborn children.

Immunogen: Synthetic peptide within human EP-CAM aa 24-265 (Extracellular).

Positive control: Hela cell lysate, NIH/3T3 cell lysate, MCF-7 cell lysate, D3, A431, human colon carcinoma tissue, human kidney tissue, human breast carcinoma tissue, mouse kidney tissue.

Subcellular location: Cell membrane

Database links: SwissProt: P16422 Human | Q99JW5 Moses

Recommended Dilutions:

WB	1:1,000-1:2,000
IF-Cell	1:100-1:200
IHC-P	1:200-1:500

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

Purity: Protein L affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

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Images

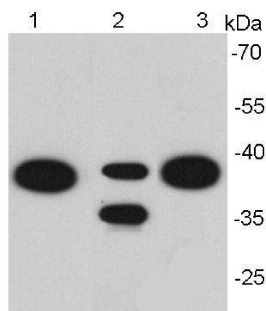


Fig1: Western blot analysis of EpCAM on different lysates using anti- EpCAM antibody at 1/1000 dilution.

Positive control:

Lane 1: Hela cell lysate

Lane 2: NIH/3T3 cell lysate

Lane 3: MCF-7 cell lysate

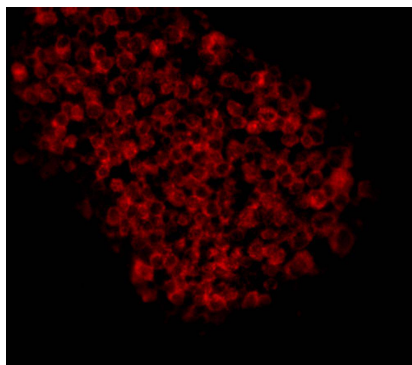


Fig2: ICC staining EpCAM in D3 cells (red). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

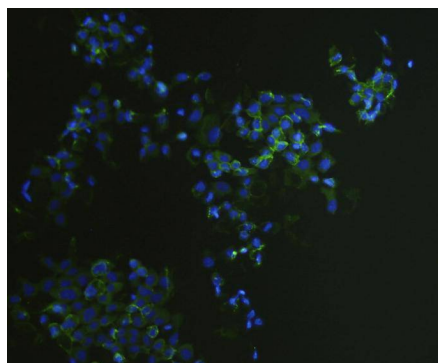


Fig3: ICC staining EpCAM in A431 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

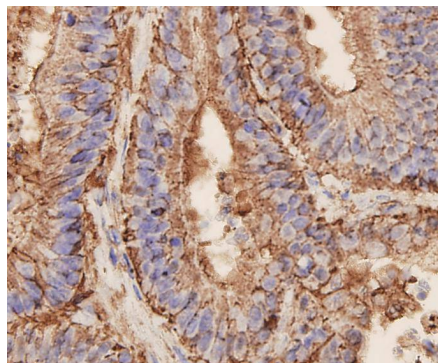


Fig4: Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue using EpCAM antibody. Counter stained with hematoxylin.

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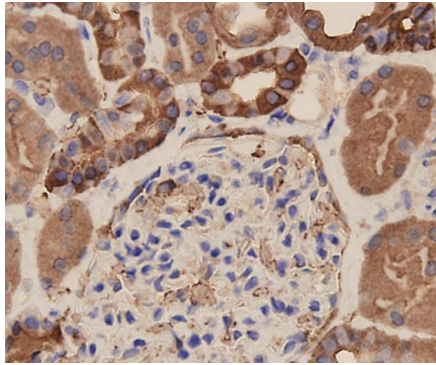


Fig5: Immunohistochemical analysis of paraffin-embedded human kidney tissue using EpCAM antibody. Counter stained with hematoxylin.

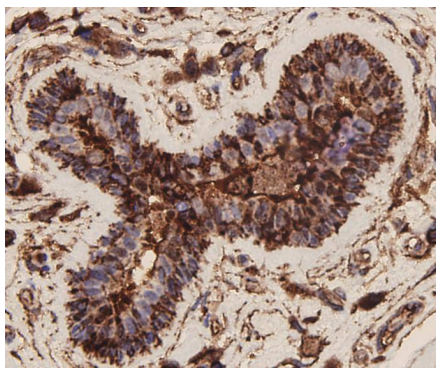


Fig6: Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using EpCAM antibody. Counter stained with hematoxylin.

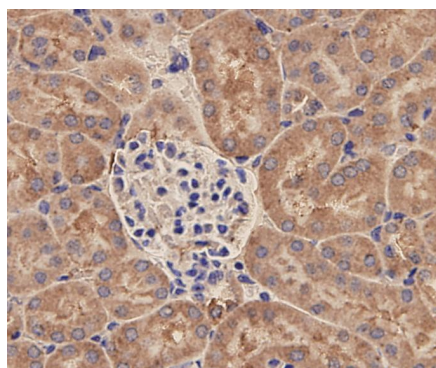


Fig7: Immunohistochemical analysis of paraffin-embedded mouse kidney tissue using EpCAM antibody. Counter stained with hematoxylin.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. "The carcinoma-associated antigen EpCAM upregulates c-myc and induces cell proliferation." Muenz M., Kieu C., Mack B., Schmitt B., Zeidler R., Gires O. *Oncogene* 23:5748-5758(2004)
2. "The cell-cell adhesion molecule EpCAM interacts directly with the tight junction protein claudin-7." Ladwein M., Pape U.F., Schmidt D.S., Schnoelzer M., Fiedler S., Langbein L., Franke W.W., Moldenhauer G., Zoeller M. *Exp. Cell Res.* 309:345-357(2005)
3. "Glycosylation is crucial for stability of tumour and cancer stem cell antigen EpCAM." Munz M., Fellingner K., Hofmann T., Schmitt B., Gires O. *Front. Biosci.* 13:5195-5201(2008)
4. "Characterization of epithelial cell adhesion molecule as a surface marker on undifferentiated human embryonic stem cells." Ng V.Y., Ang S.N., Chan J.X., Choo A.B. *Stem Cells* 28:29-35(2010)

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