NKMAXBiO We support you, we believe in your research Human EpCAM/TROP-1 antibody Catalog Number: ATGA0515

# **PRODUCT INFORMATION**

Catalog number ATGA0515

Clone No. AT36F10

**Product type** Monoclonal Antibody

UnitProt No. P16422

NCBI Accession No. NP\_002345

## **Alternative Names**

Epithelial cell adhesion molecules, CD326, KS1/4, KSA, M4S1, MIC18, MK-1, TACSTD1, TROP1, DIAR5, EGP, GA733 2, HNPCC8

# **PRODUCT SPECIFICATION**

Antibody Host Mouse

Reacts With Human

**Concentration** 1mg/ml (determined by BCA assay)

#### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

#### Immunogen

Recombinant human EpCAM/TROP-1 (24-265aa) purified from E. coli

# Isotype

lgG2b kappa

**Purification Note** By protein-A affinity chromatography

# Application

ELISA, WB, ICC/IF

## Usage

The antibody has been tested by ELISA, Western blot and ICC/IF analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.



#### Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

#### 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.

#### **General References**

Litvinov. Sergey., et al. (1994) The Journal of Cell Biology 125(2): 437-46. Maetzel D., et al. (2009) Nat Cell Biol. 11(2): 162-71. Osta WA., et al. (2004) Cancer Res. 64(16): 5818-24. Munz M., et al. (2004) Oncogene 23(34): 5748-58. Armstrong A., et al. (2003) Cancer Biol Ther, 2(4): 320-6.

## DATA

#### Western blot analysis (WB)



The cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human EpCAM/TROP-1 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system. Lane 1.: MCF7 cell lysate Lane 2.: PC3 cell lysate Lane 3.: HeLa cell lysate

#### Immunocytochemistry/Immunofluorescence (ICC/IF)



ICC/IF analysis of EpCAM/TROP-1 in A431 cells. The cell was stained with ATGA0515 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

