

Product datasheet for TA386436

OriGene Technologies, Inc.

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EPCAM Rabbit Monoclonal Antibody [Clone ID: KS1/4]

Product data:

Product Type: Primary Antibodies

Clone Name: KS1/4

Applications:ELISA, FCReactivity:HumanHost:Rabbit

Isotype:IgG, kappaClonality:Monoclonal

Immunogen: The original antibody was generated by immunizing BALB/c mice with human

adenocarcinoma of the lung cell line UCLA P3.

Specificity: This antibody binds to the EpCAM receptor which is expressed on surface of

adenocarcinomas and almost all epithelial cell membranes except mesodermal and neural

cell membranes.

This antibody has been shown to be an effective agent for the invitro detection of disease and invivo diagnosis, prognosis and treatment of adenocarcinoma. Initial specificity of the antibody was determined by ELISA. Immunoperoxidase staining and immunofluorescence staining techniques were used to identify the reactivity of the antibody with various tissues (PMID: 6362852). The monoclonal antibody-vinca alkaloid conjugate, KS1/4-DAVLB (LY256787) were administered to nude mice bearing P3/UCLA human lung adenocarcinoma tumors. It was shown that KS1/4 monoclonal antibody targets DAVLB to the P3/UCLA human lung adenocarcinoma in vivo in the human xenograft model and that an increased therapeutic index may be achieved with LY256787 over conventional free drug therapy. (PMID: 3494841). KS1/4-DAVLB conjugates were also used for site directed therapy of epithelial malignancies (PMID: 2979063). Flow cytometric methods were used to evaluate of the cell surface binding properties of monoclonal antibody (KS1/4)-drug/toxin conjugates (PMID: 3492560). Further characterization of the antibody via immunoperoxidase techniques, flow cytometric analyses and solid phase enzyme-linked immunoassays suggested that this antibody represents an epithelial malignancy marker (PMID: 3049306). Phase I clinical trials revealed that 10 out of eleven patients had human anti-mouse response (Elias et al., 1990). Humanized version of this antibody is available on request.

Formulation: PBS with 0.02% Proclin 300.



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Concentration: lot specific

Conjugation: Unconjugated

Storage: Please store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C. Avoid

freeze and thaw cycles.

Stability: 3 years from dispatch.

Gene Name: epithelial cell adhesion molecule

Database Link: Entrez Gene 4072 Human

P16422

Synonyms: 17-1A; 323/A3; CD326; CO-17A; CO17-1A; EGP; EGP-2; EGP34; EGP40; EGP314; Ep-CAM; ESA;

GA733-2; HEA125; hEGP-2; hEGP314; KS1/4; KSA; Ly74; M1S2; M4S1; MH99; MIC18; MK-1;

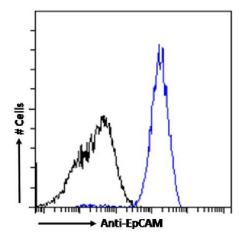
MOC31; TACST-1; TACSTD1; TROP1

Note: This chimeric rabbit antibody was made using the variable domain sequences of the original

Mouse IgG2a format, for improved compatibility with existing reagents, assays and

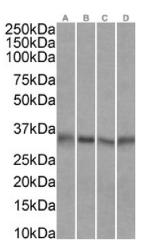
techniques.

Product images:



Flow cytometry using the Anti-EpCAM antibody KS1/4 (TA386436). Paraformaldehyde fixed Caco-2 cells were stained with anti-unknown specificity antibody ([TA385792]; isotype control, black line) or the rabbit IgG version of KS1/4 (TA386436, blue line) at a dilution of 1:100 for 1h at RT. After washing, the bound antibody was detected using a goat anti-rabbit IgG AlexaFluor® 488 antibody at a dilution of 1:1000 and cells analyzed using a FACSCanto flow-cytometer.





Western Blot using Anti-EpCAM antibody KS1/4 (TA386436). A431(A), Caco-2(B), MCF7(C) and HepG2(D) cell lysates (35 μ g protein in RIPA buffer) were resolved on a SDS PAGE gel and blots were probed with the chimeric rabbit version of KS1/4 (TA386436) at 2 μ g/ml before detection using an anti-rabbit secondary antibody. A primary incubation of 1h was used and protein was detected by chemiluminescence.