

Anti-EpCAM [HEA125] Standard Size Ab01421-10.3

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1, Fc Silent™, Kappa

Clone Number: HEA125

Alternative Name(s) of Target: CD326; Ep-CAM; Epithelial cell adhesion molecule; 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; HEA 125

UniProt Accession Number of Target Protein: P16422

Published Application(s): IP, RIA, WB, FC, IF, IHC

Published Species Reactivity: Human

Immunogen: This antibody was raised by immunising BALB/c mice with the human colon carcinoma cell line HT-29.

Specificity: This antibody is specific for the extracytoplasmic part of human EpCAM, a stable and widely-distributed marker expressed on the surface of many adenocarcinomas. It reacts with carcinomas derived from the colorectum, stomach, pancreas, liver, lung, mammary gland, ovary, thyroid, kidney, urinary bladder and prostate.

Application Notes: This antibody has applications in the detection of normal and neoplastic epithelial cells, and distinguishing carcinomas from non-epithelial neoplasms (Momburg et al, 1987). This antibody has been used in radioimmunoassays on live cells and immunoenzymatic staining assays on glutaraldehyde-fixed cells, as well as in immunoperoxidase staining of frozen and formalin-fixed paraffin tissue sections (Moldenhauer et al, 1987; Momburg et al, 1987). These revealed it to react with most normal human epithelial cells, but not non-epithelial tissue, and to intensely react with human carcinomas and metastatic lesions, but not lymphoma, melanoma, sarcoma or neuroblastoma cell lines (Moldenhauer et al, 1987; Momburg et al, 1987). Squamous cell carcinomas stain less strongly than adenocarcinomas, and keratinizing areas of tumor masses remain negative (Momburg et al, 1987). This antibody has also been used in immunoprecipitation analysis to characterise human EpCAM (Moldenhauer et al, 1987), and in immunohistochemical analysis of EpCAM expression in formalin-fixed, paraffin-embedded liver tissue

sections (Igarashi et al, 2013; Wang et al, 2018) and frozen liver tissue sections (Crosby et al, 1998). Additionally, it has been used in the immunocytochemical detection of EpCAM expression in mononuclear cell preparations obtained from human peripheral blood or lamina propria (Qiao et al, 1996).

Antibody First Published in: Moldenhauer et al. Epithelium-specific surface glycoprotein of Mr 34,000 is a widely distributed human carcinoma marker. Br J Cancer. 1987 Dec; 56(6): 714–721. [PMID:2449234](#)

Note on publication: Describes the original generation of this antibody, and its characterisation.

Product Form

Size: 200 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

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

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.