Anti-Modified cytokeratin [COU-1] Standard Size Ab03187-15.0

This antibody does not have a J-chain and therefore presents as a hexamer, rather than a pentamer.

Isotype and Format: Human IgM, Kappa
Clone Number: COU-1
Alternative Name(s) of Target: KRT8; CYK8; Keratin type II cytoskeletal 8; Cytokeratin-8; Type-II keratin Kb8; KRT18; CYK18; Keratin type I cytoskeletal 18; Cytokeratin-18; Cell proliferation-inducing gene 46 protein; COU1; B9165; ECACC 87040201
UniProt Accession Number of Target Protein: P05787; P05783
Published Application(s): ICC, tumor imaging, WB, ELISA, IHC
Published Species Reactivity: Human
Immunogen: The original antibody was generated by fusing the human lymphoblastoid cell line WI-L2-729-HF2 with lymphocytes obtained from mesenteric lymph nodes from a colon cancer patient.
Specificity: This antibody binds modified forms of human cytokeratin 8 and cytokeratin 18. It is reported that this antibody recognizes an intracellularly located cytokeratin protein that is strongly expressed in adenocarcinomas.
Application Notes: This antibody reacted with a panel of colon cancer cell lines and melanoma cell lines in a immunocytochemical assay. This antibody strongly reacted with antigens expressed on autologous and allogeneic colorectal cancers in an immunohistochemical analysis of formalin-fixed paraffin-embedded tissues (PMID: 3699931). Electron microscopy of colonic adenocarcinoma cells, intact tumor and colonic epithelium by the immunogold technique demonstrated that the C-OU1 antibody reacted with a molecule associated with areas of disruption of the intermediate filaments in the cytoplasm of the tumor cells (PMID: 1607210). This antibody can also recognize modified cytokeratin from tumor extracts in a western blot (PMID: 1607210). This binding of this antibody to different recombinant heterotypic K8/K18 complexes was determined by ELISA. This antibody cannot bind K8(1-65)/intact K18 and intact K8(1-85)/intact K18 complexes in an ELISA (US20050048070). 131 Iodine labeled COU-1 antibody was also used in the detection and localization of tumors using immunoscintigraphy (PMID: 8306271; 8261404). The binding of this antibody to modified cytokeratin expressed on the surface of carcinoma cells causes their endocytosis, demonstrating that modified cytokeratin may serve as potential targets for delivery of immunoconjugates into cancerous cells (PMID: 9223323).
Antibody First Published in: Christensen et al. Human-human hybridomas for the study of anti-tumor immune response in patients with colorectal cancer. Int J Cancer. 1986 May 15;37(5):683-8.

PMID:3699931

Note on publication: Describes the generation of a human-human hybridoma with lymphocytes from patients with colorectal cancer.

Product Form

Size: 50 µg Purified antibody.
Purification: Affinity Purified using a recombinant lectin column
Supplied In: PBS with 0.02% Proclin 300.
Storage Recommendation: Store at 4ºC for up to 3 months. For longer storage, aliquot and store at -20ºC.
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.