



Mouse anti-Human 40kDa Pan Carcinoma monoclonal antibody, clone LT2/5 (CABT-B9170)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Immunogen	UCLA-P3 cells
Isotype	IgG2a
Source/Host	Mouse
Species Reactivity	Human
Clone	LT2/5
Purification	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Conjugate	Unconjugated
Applications	FC; IHC-Fr; IP; IF
Format	Liquid
Concentration	0.5 mg/ml
Size	100 µg
Buffer	Aqueous buffered solution containing ≤0.09% sodium azide.
Storage	Store undiluted at 4°C.

BACKGROUND

Introduction

The antigen (Ag), defined by the LT2/5 antibody (LT2/5), is expressed in many epithelial-derived carcinomas and normal epithelial cell surfaces. The cDNA encoding KS1/4 has been isolated and contains an open reading frame of 314 amino acids including a putative signal sequence. KS1/4 Ag migrates as three glycosylated polypeptides with molecular masses of 35, 40 and 42 kDa. The 40 and 42 kDa species are similar proteins and appear to differ only by their degree of N-linked glycosylation. The 35 kDa species results from proteolytic cleavages of the larger molecular weight proteins. LT2/5 was first described as a monoclonal antibody which recognized a lung adenocarcinoma associated antigen. In oncolytic drug targeting studies, LT2/5 suppressed the growth of human lung tumor xenografts in athymic nude mice. Subsequent studies showed that KS1/4 reacts with a variety of tumor tissues including colon, breast, ovarian, and pancreas. It also recognizes normal epithelium including colon, stomach, small intestine, liver, kidney, lung, pancreas, skin and ovary. These results suggest that Ag represents an epithelial cell/epithelial-derived carcinoma marker. LT2/5 recognizes a 40 - 42 kDa antigen expressed on the cell surfaces of a variety of epithelial tumors and normal epithelial cell types. LT2/5 also recognizes a 35 kDa proteolytic fragment. UCLA-P3 cells derived from a human adenocarcinoma of the lung were used as immunogen.

Keywords

EPCAM; epithelial cell adhesion molecule; ESA; KSA; M4S1; MK-1; DIAR5; EGP-2; EGP40; KS1/4; MIC18; TROP1; EGP314; HNPCC8; TACSTD1; epithelial glycoprotein 314; human epithelial glycoprotein-2; cell surface glycoprotein Trop-1; adenocarcinoma-associated antigen; tumor-associated calcium signal transducer 1; major gastrointestinal tumor-associated protein GA733-2; membrane component, chromosome 4, surface marker (35kD glycoprotein);

GENE INFORMATION

Entrez Gene ID

[4072](#)

UniProt ID

[P16422](#)