



Mouse Anti-Human CDCEP1 Monoclonal Antibody, clone 9A2 [Functional Grade] (CABT-Z657M)

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

PRODUCT INFORMATION

Product Overview	Low endotoxin level (≤ 1.0 EU/mg) monoclonal antibody recognizes an epitope within the extracellular domain of human/mouse CDCEP1. More Lower endotoxin level (≤ 0.5 EU/mg) antibody is also available.
Immunogen	His-tagged recombinant fragment from the internal region of human CUB domain-containing protein 1.
Isotype	IgG2b, κ
Source/Host	Mouse
Species Reactivity	Human
Clone	9A2
Purification	Protein A or G purified
Conjugate	Functional Grade
Applications	FC Recommended concentration: FC: ≤ 1 μ g per 10^6 cells in a volume of 100 μ l or 100 μ l of whole blood.
Format	Liquid
Concentration	Lot specific
Size	1 mg

Buffer	0.01 M phosphate buffered saline (PBS) pH 7.2 - 7.4, 150 mM NaCl with no carrier protein, potassium, calcium or preservatives added. Endotoxin Level \leq 1.0 EU/mg as determined by the LAL method
Preservative	None
Storage	Functional grade biosimilar antibodies may be stored sterile as received at 2-8°C for up to one month. For longer term storage, aseptically aliquot in working volumes without diluting and store at -80°C. Avoid Repeated Freeze Thaw Cycles.
Ship	Wet ice

BACKGROUND

Introduction

CDCP1 is a transmembrane glycoprotein of molecular weight 140 kDa. CDCP1 is a ligand for a receptor molecule (CD6) that is expressed on some T-cells and is thought to be involved in T-cell migration and chemotaxis. It has a large extracellular domain that includes two CUB domains, and a smaller intracellular domain. The smaller intracellular domain contains five tyrosine residues (Y707, Y734, Y743, Y762 and Y806). CDCP1 is cleaved next to Arg368 (at the extracellular domain) by serine proteases. This cleavage yields a truncated molecule with a molecular weight of 80 kDa. CDCP1 is not typically cleaved *In vivo*. However, its cleavage can be induced during tumorigenesis or tissue injury. CDCP1 acts as a substrate for Src family kinases which exclusively mediate the phosphorylation of CDCP1. In cultured cells, tyrosine phosphorylation of CDCP1 transpires when cells are stimulated to detach via trypsin or EDTA. This detachment is associated with the phosphorylation of CDCP1 along with the simultaneous dephosphorylation of focal adhesion proteins. Conversely, during cellular attachment, CDCP1 is dephosphorylated, while focal adhesion proteins are simultaneously phosphorylated. Furthermore, CDCP1 is suspected to play a role in autoimmune diseases such as encephalomyelitis, multiple sclerosis and inflammatory arthritis.

Keywords

CDCP1;CUB domain containing protein 1;CUB domain-containing protein 1;CD318;SIMA135;membrane glycoprotein gp140

GENE INFORMATION

Gene Name

CDCP1

Entrez Gene ID

[64866](#)

UniProt ID

[Q9H5V8](#)