

Anti-MCP antibody



Description	Unconjugated Rabbit polyclonal to MCP
Model	STJ190956
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human MCP protein.
Immunogen Region	10-90aa
Gene ID	4179
Gene Symbol	CD46
Dilution range	WB 1:500-2000 ELISA 1:5000-20000
Specificity	MCP Polyclonal Antibody detects endogenous levels of protein.
Tissue Specificity	Expressed by all cells except erythrocytes.
Purification	MCP antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Membrane cofactor protein TLX Trophoblast leukocyte common antigen CD antigen CD46
Molecular Weight	43 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:6953OMIM:120920
Alternative Names	Membrane cofactor protein TLX Trophoblast leukocyte common antigen CD antigen CD46
Function	Acts as a cofactor for complement factor I, a serine protease which protects autologous cells against complement-mediated injury by cleaving C3b and C4b deposited on host tissue. May be involved in the fusion of the spermatozoa with the oocyte during fertilization. Also acts as a costimulatory factor for T-cells which induces the differentiation of CD4+ into T-regulatory 1 cells. T-regulatory 1 cells suppress immune responses by secreting interleukin-10, and therefore are thought to prevent autoimmunity. (Microbial infection) A number of viral and bacterial pathogens seem to bind MCP in order to exploit its immune regulation property and directly induce an immunosuppressive phenotype in T-cells. Acts as a receptor for adenovirus subgroup B2 and Ad3, cultured measles virus and herpesvirus 6 . May act as a receptor for pathogenic bacteria Neisseria and Streptococcus pyogenes .
Sequence and Domain Family	Sushi domains 1 and 2 are required for interaction with human adenovirus B PIV/FIBER protein and with Measles virus H protein. Sushi domains 2 and 3 are required for Herpesvirus 6 binding. Sushi domain 3 is required for Neisseria binding. Sushi domains 3 and 4 are required for interaction with Streptococcus pyogenes M protein and are the most important for interaction with C3b and C4b.
Cellular Localization	Cytoplasmic vesicle, secretory vesicle, acrosome inner membrane. Inner acrosomal membrane of spermatozoa. Internalized upon binding of Measles virus, Herpesvirus 6 or Neisseria gonorrhoeae, which results in an increased susceptibility of infected cells to complement-mediated injury. In cancer cells or cells infected by Neisseria, shedding leads to a soluble peptide.
Post-translational Modifications	N-glycosylated on Asn-83; Asn-114 and Asn-273 in most tissues, but probably less N-glycosylated in testis. N-glycosylation on Asn-114 and Asn-273 is required for cytoprotective function. N-glycosylation on Asn-114 is required for Measles virus binding. N-glycosylation on Asn-273 is required for Neisseria binding. N-glycosylation is not required for human adenovirus binding.; Extensively O-glycosylated in the Ser/Thr-rich domain. O-glycosylation is required for Neisseria binding but not for Measles virus or human adenovirus binding.; In epithelial cells, isoforms B/D/F/H/J/L/3 are phosphorylated by YES1 in response to infection by Neisseria gonorrhoeae; which promotes infectivity. In T-cells, these isoforms may be phosphorylated by LCK.