

Product datasheet

Recombinant Cynomolgus monkey CD46 protein (His tag) ab271619

[1 Image](#)

Description

Product name	Recombinant Cynomolgus monkey CD46 protein (His tag)	
Purity	>= 80 % SDS-PAGE.	
Expression system	HEK 293 cells	
Accession	<u>A0A2K5WCR2</u>	
Protein length	Protein fragment	
Animal free	No	
Nature	Recombinant	
Species	Cynomolgus monkey	
Sequence	MASSGRRERPFSSGRFPGLLLATLVLQLSSFS DACEAPP TFEAMELIGKP KPYYRVGERVDYKCKKGYFYPLATHHTICDRNHTWLPVSD EGCYREMCP HIRDPLNGEAILANGSYEFGAELHFICNEGYYLIGKDILYCEL KDTVAIW SGKPPLCEKILCTPPPKIKNGKHTFSEVEVFEYLDVAVTYS DPAPGPDF SLIGESMIYCGNNSTWSHAPECKVVKCRFPVVENGGKQIS GFGKKFYKA TVMFECDKGYLNGSDKMCESNSTWDPPVPKCLKVSTS PTTKSPSSAS GPRPTYKPPVSNYPGYPKPDEGILNNLDHHHHHHHHHH	
Molecular weight information	This protein runs at a higher MW by SDS-PAGE due to glycosylation.	
Amino acids	35 to 328	
Tags	His tag C-Terminus	

Specifications

Our **Abpromise guarantee** covers the use of **ab271619** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications SDS-PAGE

Form Liquid

Preparation and Storage

Stability and Storage Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle.
pH: 7.40
Constituents: 0.13% Sodium phosphate, 0.64% Sodium chloride, 0.02% Potassium chloride, 20% Glycerol (glycerin, glycerine)

General Info

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. A number of viral and bacterial pathogens seem to exploit this property and directly induce an immunosuppressive phenotype in T-cells by binding to CD46.

Tissue specificity Expressed by all cells except erythrocytes.

Involvement in disease Defects in CD46 are a cause of susceptibility to hemolytic uremic syndrome atypical type 2 (AHUS2) [MIM:612922]. An atypical form of hemolytic uremic syndrome. It is a complex genetic disease characterized by microangiopathic hemolytic anemia, thrombocytopenia, renal failure and absence of episodes of enterocolitis and diarrhea. In contrast to typical hemolytic uremic syndrome, atypical forms have a poorer prognosis, with higher death rates and frequent progression to end-stage renal disease. Note=Susceptibility to the development of atypical hemolytic uremic syndrome can be conferred by mutations in various components of or regulatory factors in the complement cascade system. Other genes may play a role in modifying the phenotype. Patients with CD46 mutations seem to have an overall better prognosis compared to patients carrying CFH mutations.

Sequence similarities Contains 4 Sushi (CCP/SCR) domains.

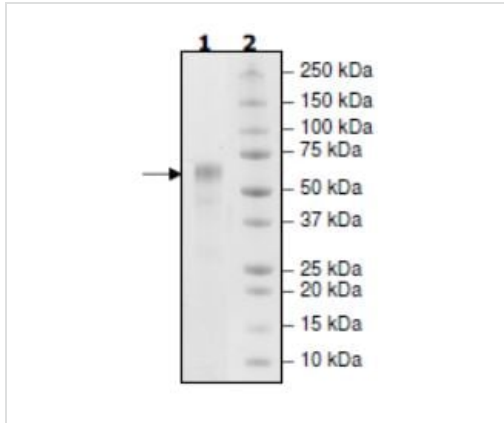
Domain Sushi domains 1 and 2 are required for interaction with human adenovirus B PIV/FIBER protein and with Measles virus H protein. Sushi domains 2 and 3 are required for Herpesvirus 6 binding. Sushi domain 3 is required for Neisseria binding. Sushi domains 3 and 4 are required for interaction with Streptococcus pyogenes M protein and are the most important for interaction with C3b and C4b.

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.

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.

Images



SDS-PAGE analysis of 2 µg ab271619.

This protein runs at a higher MW by SDS-PAGE due to glycosylation.

SDS-PAGE - Recombinant Cynomolgus monkey
CD46 protein (His tag) (ab271619)

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