

ARG83278
Human CD46 ELISA KitPackage: 96 wells
Store at: 4°C

Summary

Product Description	ARG83278 Human CD46 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human CD46 in Serum, Plasma and Cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Specificity	There is no detectable cross-reactivity with other relevant proteins.
Target Name	CD46
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	25 pg/ml
Detection Range	312 pg/ml - 20,000 pg/ml
Sample Type	Serum, Plasma and Cell culture supernatants
Precision	Intra-Assay CV: 3.8% Inter-Assay CV: 4.3%
Alternate Names	MIC10; TLX; CD antigen CD46; Trophoblast leukocyte common antigen; AHUS2; TRA2.10; Membrane cofactor protein; MCP

Application Instructions

Assay Time	~ 5 hours
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Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

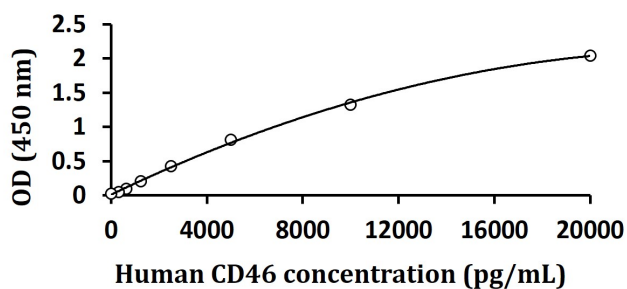
Bioinformation

Gene Symbol	CD46
Gene Full Name	CD46 molecule, complement regulatory protein
Background	The protein encoded by this gene is a type I membrane protein and is a regulatory part of the complement system. The encoded protein has cofactor activity for inactivation of complement components C3b and C4b by serum factor I, which protects the host cell from damage by complement. In addition, the encoded protein can act as a receptor for the Edmonston strain of measles virus, human herpesvirus-6, and type IV pili of pathogenic Neisseria. Finally, the protein encoded by this gene may be involved in the fusion of the spermatozoa with the oocyte during fertilization. Mutations at this

locus have been associated with susceptibility to hemolytic uremic syndrome. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Jun 2010]

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. [UniProt]
PTM	<p>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.</p> <p>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.</p> <p>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. [UniProt]</p>
Cellular Localization	Cytoplasmic vesicle, secretory vesicle, acrosome inner membrane; Single-pass type I membrane protein. Note=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. [UniProt]

Images



ARG83278 Human CD46 ELISA Kit standard curve image

ARG83278 Human CD46 ELISA Kit results of a typical standard run with optical density reading at 450 nm.