



# Recombinant Protein Technical Manual

## Recombinant Human CD46 Protein (His Tag)

RPES5245

### Product Data:

**Product SKU:** RPES5245

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** P15529

### Protein Information:

**Molecular Mass:** 33.8 kDa

**AP Molecular Mass:** 55 kDa

**Tag:** C-6His

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Membrane Cofactor Protein; TLX; Trophoblast Leukocyte Common Antigen; CD46; MCP; MIC10; AHUS2; TLX; TRA2.10

## Immunogen Information:

**Sequence:** Cys35-Asp328

## Background:

CD46 is a type I membrane protein containing four Sushi domains. CD46 is expressed by all cells except erythrocytes. CD46 has cofactor activity for inactivation of complement components C3b and C4b by serum factor I, which protects the host cell from damage by complement. It may be involved in the fusion of the spermatozoa with the oocyte during fertilization. CD46 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 interleukin0, and therefore are thought to prevent autoimmunity. A number of viral and bacterial pathogens exploit this property and directly induce an immunosuppressive phenotype in T-cells by binding to CD46. CD46 acts as a receptor for the Edmonston strain of measles virus, human herpesvirus-6, and type IV pili of pathogenic Neisseria.