

Recombinant Protein Technical Manual Recombinant Human CD59 Protein (His Tag) RPES5005

Product Data

Product SKU: RPES5005	<b>Size:</b> 50µg
Species: Human	Expression host: HEK293 Cells

Uniprot: P13987

Proteir	n Inforn	nation

Molecular Mass:	10.2 kDa
AP Molecular Mass:	139 kDa
Tag:	C-His
Bio-activity:	
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per $\mu g$ 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 sterile PBS, pH 7.4
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	16.3A5;1F5;EJ16;EJ30;EL32;FLJ38134;FLJ92039;G344;HRF-20;HRF20;MAC- IP;MACIF;MEM43;MGC2354;MIC11;MIN1;MIN2;MIN3;MIRL;MSK21;p18-20

## Sequence: Met 1-Glu 101

## **Background:**

CD59 glycoprotein, also known as 20 kDa homologous restriction factor, HRF20, MAC-inhibitory protein, Membrane attack complex inhibition factor, Membrane inhibitor of reactive lysis, MIC11, MIRL and CD59, is a cell membrane protein which contains one UPAR/Ly6 domain. CD59 is a small, highly glycosylated, GPIlinked protein, with a wide expression profile. The soluble form of CD59 from urine retains its specific complement binding activity, but exhibits greatly reduced ability to inhibit MAC assembly on cell membranes. CD59 is a potent inhibitor of the complement membrane attack complex (MAC) action. CD59 was first identified as a regulator of the terminal pathway of complement. It acts by binding to the C8 and/or C9 complements of the assembling MAC, thereby preventing incorporation of the multiple copies of C9 required for complete formation of the osmolytic pore. This inhibitor appears to be species-specific. CD59 is involved in signal transduction for T-cell activation complexed to a protein tyrosine kinase. Defects in CD59 are the cause of CD59 deficiency (CD59D).