

## HUMAN CD59 PROTEIN, HFC TAG

**Cat.#:** 11794

**Product Name:** Human CD59 Protein

**Size:** 10 µg, 50 µg and 100 µg

**Synonyms:** HRF20;MAC-IP;MACIF;MIRL;MIC11;MIN1;MIN2;MIN3;MSK21

**Target:** CD59

**UNIPROT ID:** P13987

**Description:** Recombinant human CD59 protein with C-terminal human Fc tag

**Background:** This gene encodes a cell surface glycoprotein that regulates complement-mediated cell lysis, and it is involved in lymphocyte signal transduction. This protein is a potent inhibitor of the complement membrane attack complex, whereby it binds complement C8 and/or C9 during the assembly of this complex, thereby inhibiting the incorporation of multiple copies of C9 into the complex, which is necessary for osmolytic pore formation. This protein also plays a role in signal transduction pathways in the activation of T cells. Mutations in this gene cause CD59 deficiency, a disease resulting in hemolytic anemia and thrombosis, and which causes cerebral infarction. Multiple alternatively spliced transcript variants, which encode the same protein, have been identified for this gene. [provided by RefSeq, Jul 2008]

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 35.1 kDa after removal of the signal peptide. The apparent molecular mass of CD59-hFc is approximately 40-53 kDa due to glycosylation.

**Molecular Characterization:** CD59(Leu26-Asn102) hFc(Glu99-Ala330)

**Purity:** The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

**Formulation & Reconstitution:** Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

**Storage & Shipping:** Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.



Figure 1. Human CD59 Protein, hFc Tag on SDS-PAGE under reducing condition.