

MOUSE CS1 PROTEIN, HFC TAG**Cat.#:** 12126**Product Name:** Mouse CS1 Protein**Size:** 10 µg, 50 µg and 100 µg**Synonyms:** 19A;19A24;4930560D03Rik;CRACC;SLAMF7**Target:** CS1**UNIPROT ID:** Q8BHK6**Description:** Recombinant mouse CS1 protein with C-terminal human Fc tag

Background: Self-ligand receptor of the signaling lymphocytic activation molecule (SLAM) family. SLAM receptors triggered by homo- or heterotypic cell-cell interactions are modulating the activation and differentiation of a wide variety of immune cells and thus are involved in the regulation and interconnection of both innate and adaptive immune response. Activities are controlled by presence or absence of small cytoplasmic adapter proteins, SH2D1A/SAP and/or SH2D1B/EAT-2 (PubMed:19648922). Mediates natural killer (NK) cell activation through a SH2D1A-independent extracellular signal-regulated ERK-mediated pathway (By similarity). Positively regulates NK cell functions by a mechanism dependent on the adapter SH2D1B. In addition to heterotypic NK cells-target cells interactions also homotypic interactions between NK cells may contribute to activation. However, in the absence of SH2D1B, inhibits NK cell function. Acts also inhibitory in T-cells (PubMed:19151721). May play a role in lymphocyte adhesion (By similarity). In LPS-activated monocytes negatively regulates production of proinflammatory cytokines (By similarity).[UniProtKB/Swiss-Prot Function]

Species/Host: HEK293

Molecular Weight: The protein has a predicted molecular mass of 48.4 kDa after removal of the signal peptide. The apparent molecular mass of mCS1-hFc is approximately 55–70 kDa due to glycosylation.

Molecular Characterization: Mouse CS1(Ser23–Gly224) 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. Mouse CS1 Protein, hFc Tag on SDS-PAGE under reducing condition.