

## CANIS LUPUS FAMILIARIS IL18BP PROTEIN, HFC TAG

**Cat.#:** 12123

**Product Name:** Canis Lupus Familiaris IL18BP Protein

**Size:** 10 µg, 50 µg and 100 µg

**Synonyms:** IL18BP;IL18BPα;Tadekinig-alfa

**Target:** IL18BP

**UNIPROT ID:** FIPLB5

**Description:** Recombinant Canis IL18BP protein with C-terminal human Fc tag

**Background:** Interleukin-18-binding protein (IL-18BP) is a constitutively expressed and secreted protein. IL-18BP is a cytokine receptor that belongs to the interleukin 1 receptor family. This receptor specifically binds interleukin 18 (IL18) and is essential for IL18 mediated signal transduction. IFN- $\alpha$  and IL12 are reported to induce the expression of this receptor in NK and T cells. This gene along with four other members of the interleukin 1 receptor family, including IL1R2, IL1R1, IL1RL2 (IL-1Rrp2), and IL1RL1 (T1/ST2), form a gene cluster on chromosome 2q. The adjacently located family members IL18 Receptor 1 (IL18R1) and IL18 receptor accessory protein (IL18RAP) may also be important in the development of asthma and atopy. IL-18 binding protein (IL-18BP) was only moderately elevated, resulting in a high level of biologically active free IL-18 in HPS. A severe IL-18/IL-18BP imbalance results in Th-1 lymphocyte and macrophage activation, which escapes control by NK-cell cytotoxicity and may allow for secondary HPS in patients with underlying diseases.

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 43.7 kDa after removal of the signal peptide. The apparent molecular mass of dIL18BP-hFc is approximately 55-70 kDa due to glycosylation.

**Molecular Characterization:** IL18BP(Thr31-Phe192) 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.

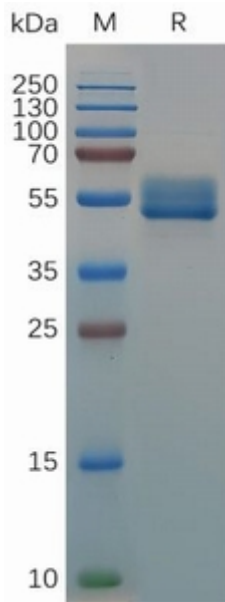


Figure 1. Canis IL18BP Protein, hFc Tag on SDS-PAGE under reducing condition.