

## Recombinant Human IL18BP Protein(His Tag)

Catalog Number: PDMH100442

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

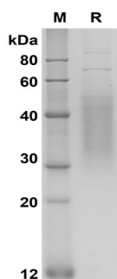
### Description

<b>Species</b>	Human
<b>Source</b>	Mammalian-derived Human IL18BP protein Thr31-Gly194, with an C-terminal His
<b>Calculated MW</b>	17.9 kDa
<b>Observed MW</b>	30-50 kDa
<b>Accession</b>	O95998
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 85% as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU/mg of the protein as determined by the LAL method
<b>Storage</b>	Generally, 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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
<b>Reconstitution</b>	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

### Data



SDS-PAGE analysis of Human IL18BP proteins, 2µg/lane of Recombinant Human IL18BP proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 30-50 kDa

### 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, ILRL2 (IL-1R $\alpha$ 2), 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.