Recombinant Human IL-18 BPa Protein(Fc Tag)

Catalog Number: PDMH100310

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

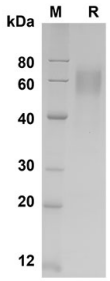
Description

Species	Human
Source	Mammalian-derived Human IL-18 BPa proteins Thr31-Gly194,with an C-terminal Fc
Calculated MW	42.9 kDa
Observed MW	60 kDa
Accession	O95998
Bio-activity	Not validated for activity

Properties

Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	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 IL-18 BPa proteins , 2μg/lane of Recombinant Human IL-18 BPa proteins was resolved with SDS-PAGE under reducing conditions , showing bands at 60 KD

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-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.