

Recombinant Human IL15RA&IL15 Fusion Protein (Fc Tag)

Catalog Number: PKSH032567

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

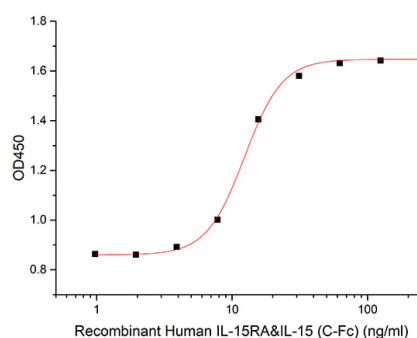
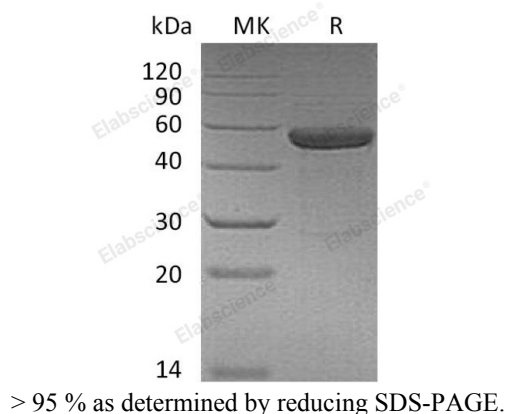
Description

Species	Human
Source	HEK293 Cells-derived Human IL15RA&IL15 Fusion protein Ile31-Asp96&Asn49-Ser162(Asn120Asp), with an C-terminal Fc
Calculated MW	46.9 kDa
Observed MW	50-60 kDa
Accession	Q13261&P40933
Bio-activity	Measured in a cell proliferation assay using CTLL- 2 mouse cytotoxic T cells. The ED ₅₀ for this effect is 5-20 ng/ml.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg 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 °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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 8% Trehalose, 4% Mannitol, 0.02% Tween 80 (w/v), pH 7.5. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



Measured in a cell proliferation assay using CTLL- 2 mouse cytotoxic T cells. The ED₅₀ for this effect is 5-20 ng/ml.

Background

IL15RA is a high-affinity receptor for interleukin-15. IL15ra associates as a heterotrimer with the IL-2 receptor beta and gamma subunits to initiate signal transduction. It can signal both in cis and trans where IL15R from one subset of cells presents IL15 to neighboring IL2RG-expressing cells. IL15ra is expressed in special cells including a wide variety of T and B cells and non-lymphoid cells. IL-15 is a cytokine that regulates T cell and natural killer cell activation and proliferation. IL-15 binds to the alpha subunit of the IL-15RA with high affinity. IL-15 also binds to the beta and gamma chains of the IL-2 receptor, but not the alpha subunit of the IL2 receptor. IL-15 is structurally and functionally related to IL-2. Both cytokines share some subunits of receptors, allowing them to compete for and negatively regulate each other's activity. The number of CD8+ memory T cells is controlled by a balance between IL-15 and IL-2. Despite their many overlapping functional properties, IL-2 and IL-15 are, in fact, quite distinct players in the immune system. IL-15 is constitutively expressed by a wide variety of cell types and tissues, including monocytes, macrophages and DCs.