Elabscience®

Recombinant Human IL-12 Receptor Subunit Beta1/IL-12RB1/CD212 (C-6His)

Catalog Number: PKSH033842

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

| Description | | |
|----------------|--|--|
| Species | Human | |
| Source | HEK293 Cells-derived Human IL-12RB1;CD212 protein Cys24-Glu540, with an C- | |
| | terminal His | |
| Calculated MW | 58.1 kDa | |
| Observed MW | 80-110 kDa | |
| Accession | P42701 | |
| Bio-activity | Not validated for activity | |
| 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 $< -20^{\circ}$ 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 PBS, pH 7.4. | |
| | 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. | |

| kDa | MK | R |
|-----------------|----|---|
| 120 90 60 | | |
| 40 | - | |
| 30 | • | |
| 20 | - | |
| 14 | ~ | |
| | | |

Background

Interleukin12 receptor subunit beta 1 (IL12RB1) is a type I transmembrane protein that belongs to the hemopoietin receptor superfamily. IL12RB1 can spontaneously form homodimers and -oligomers, which are able to bind IL12 with only low affinity. IL12 high affinity receptor complex is composed of two subunits designated IL12RB1 and IL12RB2. While IL12RB1 interacts with the IL-12p40 subunit, IL-12p35 is mainly connecting with IL12RB2. This receptor chain is also responsible for transmitting the IL12 signal into the cell. IL12RB1, to the contrary, is also part of the IL23R, where it interacts with the p40 subunit of IL23. IL12RB1 is expressed in activated T cells, NK cells and B cells.