

Recombinant Human IL23A&IL12B Protein, C-Histagged

Product Information

Cat IMP-4696

Official Symbol IL23A&IL12B

Product Overview Recombinant IL23A (NP_057668.1) (Met1-Pro189) was fused with a

polyhistidine tag at the C-terminus, constructed the plasmid 1;

Recombinant p40 subunit of human IL12, termed as IL12B (NP_002178.2)

(Met1-Ser328) was fused with a polyhistidine tag at the C-terminus, constructed the plasmid 2. The two plasmids were co-expressed and the

IL23 heterodimer was purified.

Description Associates with IL12B to form the IL-23 interleukin, an heterodimeric

cytokine which functions in innate and adaptive immunity. IL-23 may constitute with IL-17 an acute response to infection in peripheral tissues. IL-23 binds to an heterodimeric receptor complex composed of IL12RB1 and IL23R, activates the Jak-Stat signaling cascade, stimulates memory rather than naive T-cells and promotes production of proinflammatory cytokines. IL-23 induces autoimmune inflammation and thus may be responsible for autoimmune inflammatory diseases and may be important

for tumorigenesis.

Expression System HEK293

Species Human

Tag C-His

Predicted N Terminal Arg 20&lle 23

Form Lyophilized from sterile PBS, 10% Glycerol, pH7.4, 5 % trehalose, 5%

mannitol and 0.01% Tween80.

Molecular Mass The recombinant IL23 heterodimer of human IL23A/IL12B comprises 498

(181+317) amino acids and has a calculated molecular mass of 56.3 (20.1+36.2) kDa. The apparent molecular mass of rhIL23 heterodimer is approximately 22.6&42.8 kDa respectively in SDS-PAGE under reducing

conditions.

Protein length Met1-Pro189 and Met1-Ser328

Endotoxin < 1.0 EU/μg of the protein as determined by the LAL method

Purity > 90 % as determined by SDS-PAGE

Storage Samples are stable for up to twelve months from date of receipt at -20 to

-80 centigrade. Store it under sterile conditions at -20 to -80 centigrade. It is

recommended that the protein be aliquoted for optimal storage. Avoid

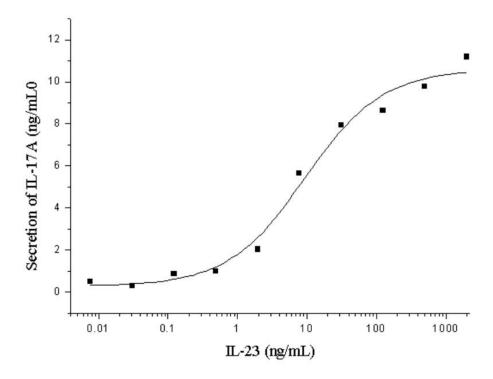


repeated freeze-thaw cycles.

Reconstitution

A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.

Bioactivity-Cel



Measured by its ability to induce IL17 secretion by mouse splenocytes. The ED50 for this effect is 4-20 ng/mL.