

Recombinant Human Interleukin-4 Biotin conjugated (rh IL-4 Biotin)

Introduction: rh IL-4 is a pleiotropic cytokine produced by activated T cells. IL-4 is a ligand for Interleukin 4 receptor. The Interleukin 4 receptor also binds to IL-13 which may contribute to many overlapping functions of this cytokine and IL-13. STAT6, a signal transducer and activator of transcription, has been shown to play a central role in mediating the immune regulatory signal of this cytokine. This gene, IL-3, IL-5, IL-13 and GM-CSF form a cytokine gene cluster on chromosome 5q, with this gene particularly close to IL-13. IL-4, IL-13 and IL-5 are found to be regulated coordinately by several long-range regulatory elements in an over 120 kilobase range on the chromosome. Two alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported.

Source: *Escherichia Coli*.

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: 0.22 µm filtered solution in 25 mM sodium phosphate, 200 mM NaCl, pH 7.5, lyophilised

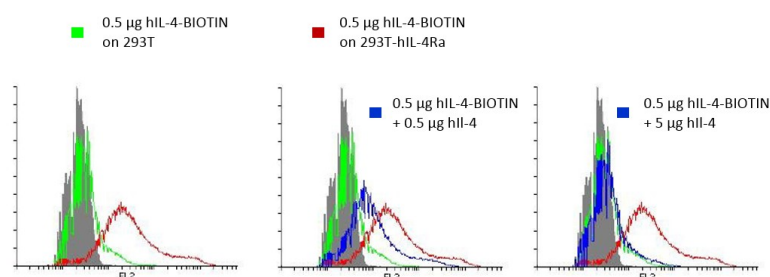
Solubility: Vial should be centrifuged before opening! Reconstitute in sterile endotoxin free water to a concentration not less than 100 µg/ml.

Stability: Lyophilized rh IL-4 Biotin although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rh IL-4 Biotin should be stored at 4° C between 2-7 days and for future use below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity: 95% (verified by SDS-PAGE / silver stain)

Amino acid sequence: MHKCDITLQE IIKTLNSLTE QKTLCTELTV TDIFAASKNT TEKETFCRAA TVLRQFYSHH EKDTRCLGAT AQQFHRHKQL IRFLKRLDRN LWGLAGLNSC PVKEANQSTL ENFLERLTKI MREKYSKCSS

Biological Activity: Tested by binding on IL-4Rα transfected HEK-293T cells: rh IL-4-BIOTIN yields strong binding signal at 0.5 µg/100 µl on 293T-hIL-4Rα cells. Binding is blocked by competition with unconjugated rh IL-4



Endotoxicity: The endotoxin level is less than 1 EU/µg determined by LAL method

<i>small</i>	2 µg	Cat.N°	1134B0042
<i>medium</i>	10 µg	Cat.N°	1134B0043
<i>large</i>	50 µg	Cat.N°	1134B0045

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

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