

Last updated 11/24/15

Certificate of Analysis

Recombinant Human Interleukin-4

Catalog #	Size	Concentration	price
PT-CF-hIL4-001		100 ug	1.0 mg/mL

Product Description: Interleukin-4 (IL-4) is a lymphokine that has pleiotropic effects on both immune and non-immune cells. IL-4 stimulates the proliferation of activated B and T cells. IL-4 preferentially induced IgE and IgG4 production. IL-4 enhances the functional activities of myeloid cells, and the cytotoxic activity of lymphocytes and monocytes. IL-4 also shows inhibitory effect on the growth of chronic lymphocytic B-cells, and anti-tumor activity.

Synonyms: IL-4, BSF-1, Binetrakin, lymphocyte stimulatory factor 1, pitrakinra

Sequence: HKCDITLQEIIKTLNSLTEQKTLCTELTVTDIFAASKNTTEKETFCRAA
TVLRQFYSHHEKDTRCLGATAQQFHRHKQLIRFLKRLDRNLWGLAGLNSCPVK
EANQSTLENFLERLKTIMREKYSKCSS

Acession #: [P05112](#)

Quality control: Verified by Mass Spectrometry analyses and disulfide mapping.

Purity: >95% by SDS-PAGE gel

Product Source: IL-4 was produced in E. Coli cells transformed with human IL-4 gene. This product is sterile and does not contain any components of **animal origin**.

Formulation: Sterile filtered through a 0.2 micron filter in 50% glycerol, 10 mM Phosphate buffer at pH 7, 200 mM NaCl

Usage: FOR LABORATORY RESEARCH USE ONLY.

Storage/Stability: Avoid repeated freeze-thaw cycles. 12 months at -20 C to -80 C. 1 month at 2 C to 8 C.

References:

1. Walter, M. R., Cook, W. J., Zhao, B. G., Cameron, R. P., Ealick, S. E., Walter, R. L., ... & Bugg, C. E. (1992). Crystal structure of recombinant human interleukin-4. *Journal of Biological Chemistry*, 267(28), 20371-20376.
2. Pene, J., Rousset, F., Brière, F., Chrétien, I., Bonnefoy, J. Y., Spits, H., ... & Banchereau, J. (1988). IgE production by normal human lymphocytes is induced by interleukin 4 and suppressed by interferons gamma and alpha and prostaglandin E2. *Proceedings of the National Academy of Sciences*, 85(18), 6880-6884.

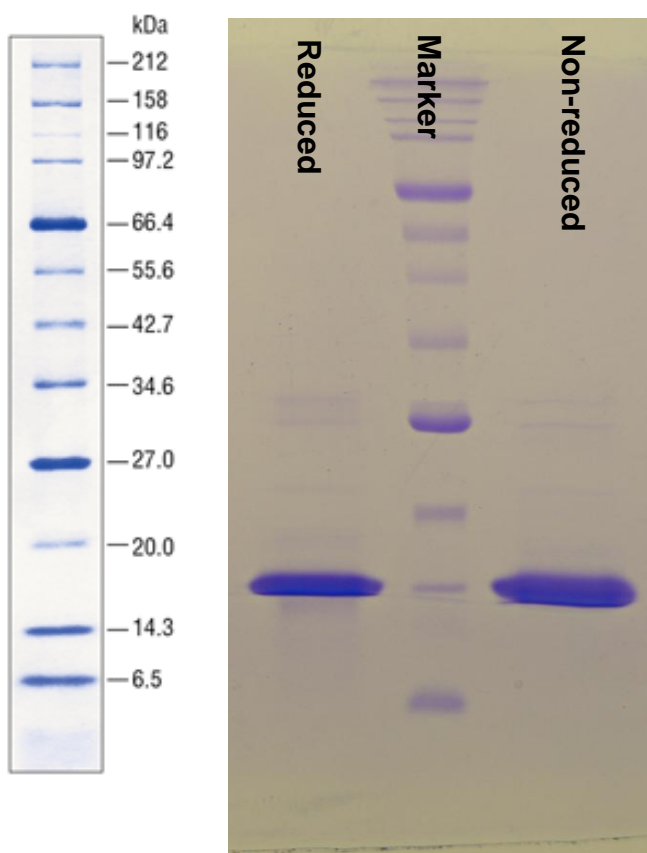


Figure 1. IL-4 SDS PAGE gel. Lane 1, IL-4 with a mass of 15 kDa on SDS-PAGE under reducing environment; Lane 2, protein marker; lane 3, IL-4 under non-reducing environment.