BioVendor - Laboratorní medicína a.s.
Karásek 1767/1
621 00 Brno

Date of issue: 13.06.2018

PRODUCT DATASHEET

IL-4 Human E. coli

Cat. No.: RD172569100
Type: Recombinant
Size: 0.1 mg
Source: E. coli
Species: Human

Description
Total 139 AA. MW: 16.2 kDa (calculated). UniProtKB acc. no. P05112 (His25–Ser153). N-terminal His-tag (10 extra AA). Protein identity confirmed by LC-MS/MS.

Other names
IL-4, B-cell stimulatory factor 1, Lymphocyte stimulatory factor 1, Binetrakin, Pitrakinra, B cell differentiation factor gamma, B cell growth factor, interleukin-4

Introduction to the molecule
IL-4 (15 to 19 kDa) is produced by a variety of T cell thymocyte populations, as well as some mast cell precursors that are non-T or B cell types. Il-4 plays an important role in the activation of resting B-cells and in the subsequent proliferation and differentiation of B-cells. IL-4 is essential for IgE synthesis in vitro and its involvement with allergic diseases has been investigated. Il-4 has anti-inflammatory effects.

Research topic
Animal studies, Cytokines and chemokines and related molecules

Amino Acid sequence
MKHHHHHHAS HKCDITLQEI IKTLNSLTEQ KTLCTELTVT DIFAASKNTT EKETFCRAAT VLRQFYSHHE KDTRCLGATA QQFHRHKQLI RFLKRLDRNL WGLAGLNSCP VKEANQSTLE NFLERLKTIM REKYSKCSS

Purity
Purity as determined by densitometric image analysis: > 95 %

Endotoxin
< 0.1 EU/µg

Formulation:
Filtered (0.4 µm) and lyophilized from 0.5 mg/ml solution in 20 mM Tris buffer, 50 mM NaCl, pH 7.5.

Reconstituion:
Add deionized water to prepare a working stock solution of approximately 0.5 mg/ml and let the lyophilized pellet dissolve completely.

Shipping
At ambient temperature. Upon receipt, store the product at the temperature recommended below.

Storage, Stability/Shelf Life
Store lyophilized protein at –80°C. Lyophilized protein remains stable until the expiry date when stored at –80°C. Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at –80°C for long term storage. Reconstituted protein can be stored at 4°C for a week.

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Quality control

BCA to determine quantity of the protein.

SDS PAGE to determine purity of the protein.

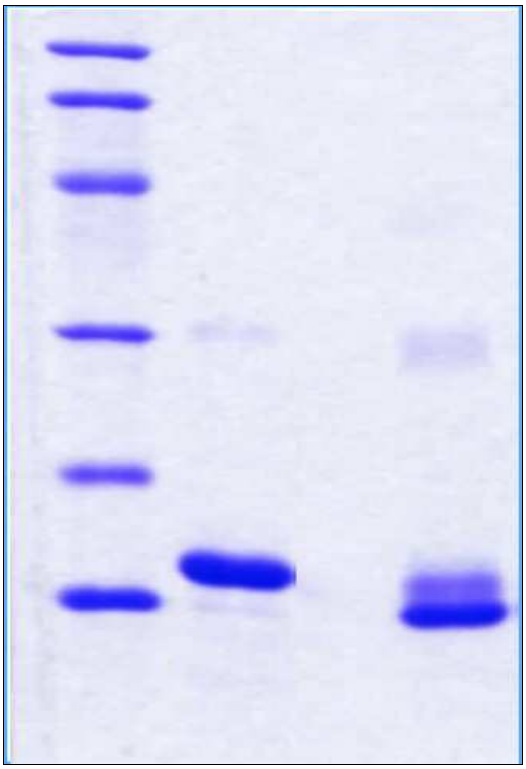
LAL to determine quantity of endotoxin.

Applications

ELISA, Western blotting

Note

This product is intended for research use only.



14 % SDS-PAGE separation of Human IL-4:
1. M.W. marker – 14, 21, 31, 45, 66, 97 kDa
2. Reduced and boiled sample, 2.5 µg/lane
3. Non-reduced and non-boiled sample, 2.5 µg/lane

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