

Thymus Expressed Chemokine, human recombinant (CCL25) (rhuCCL25)

Catalog No: 99958
Lot No: XXXXX
Source: E. coli

Synonyms: C-C motif chemokine 25, Small-inducible cytokine A25, Thymus-expressed chemokine, Chemokine TECK,

CCL25, SCYA25, TECK, Ckb15, MGC150327

Background

CCL25 (Teck) is a novel CC chemokine, which is distantly related (about 20 % amino acid sequence identity) to other CC chemokines. The mouse CCL25 cDNA has also been cloned and shown to encode a 144 aa protein, which exhibits 49% sequence identity to the human CCL25. Human and mouse CCL25 expression was shown to be greatly restricted to the thymus and small intestine. While dendritic cells are identified as the source of CCL25 production in the thymus, dendritic cells derived from bone marrow do not express CCL25. CCL25 signals through the CCR9 receptor. Teck is possibly involved in T-cell development. Recombinant human and mouse Teck were shown to be chemotactic for activated macrophages, dendritic cells and thymocytes. The recombinant protein demonstrates chemotactic activity on thymocytes, macrophages, THP-1 cells, and dendritic cells, but is inactive on peripheral blood lymphocytes and neutrophils.

Description

TECK Human Recombinant, produced in *E. coli*, is a single, non-glycosylated polypeptide chain containing 127 amino acids. It has a molecular mass of 14.2 kDa. The TECK is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered, white, lyophilized (freeze-dried) powder.

Formulation

Filtered (0.2 µm) and lyophilized from a concentrated (1 mg/ml) solution in 20 mM PB (pH 7.4) and 150 mM NaCl.

Solubility

It is recommended to reconstitute the lyophilized TECK in sterile 18 M Ω -cm H $_2$ O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized TECK, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution TECK 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.

Amino Acid Sequence

QGVFEDCCLA YHYPIGWAVL RRAWTYRIQE VSGSCNLPAA IFYLPKRHRK VCGNPKSREV QRAMKLLDAR NKVFAKLHHN MQTFQAGPHA VKKLSSGNSK LSSSKFSNPI SSSRKNVSLL ISANSGL

Activity

Determined by its ability to chemoattract human monocytes using a concentration range of 1-10 ng/ml corresponds to a specific activity of 100,000-1,000,000 IU/mg.





Usage

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