

Thymus Expressed Chemokine (CCL25), mouse recombinant (rmTECK)

Catalog No: 97571 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 a.a. protein, which exhibits 49% a.a. 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 mouse recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 121 amino acids and having a molecular mass of 14.1 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 in 1×PBS, pH 7.4.

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.

Purity

Greater than 97.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

QGAFEDCCLG YQHRIKWNVL RHARNYHQQE VSGSCNLRAV RFYFRQKVVC GNPEDMNVKR AIRILTARKR LVHWKSASDS QTERKKSNHM KSKVENPNST SVRSATLGHP RMVMMPRKTN N

Activity

Fully biologically active. Determined by its ability to chemoattract human CCR9 transfected BaF3 mouse pro-B cells using a concentration range of $0.1 - 0.5 \mu g/ml$ corresponding to a specific activity of 2 - 10 lU/mg.





Usage

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