Cytokines

Mouse Recombinant TECK (CCL25)

Thymus-expressed chemokine

Catalog #	78180	5 µg
	78180.1	25 µg

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Product Description

Thymus-expressed chemokine (TECK), or CCL25, is a member of the CC family of chemokines that regulates the movement of lymphocytes in the thymus and in the small intestine. TECK induces chemoattraction by binding the chemokine receptor CCR9, which is expressed on immature pre-T cells and thymocytes (Youn et al.; Uehara et al.). In the thymus, TECK is produced by stromal cells, whereas in the small intestine TECK is primarily produced by epithelial cells (Vicari et al.; Bowman et al.; Kunkel et al.). CCR9 is a G protein-coupled receptor and is expressed on most thymocytes, but not on natural killer cells, monocytes, eosinophils, basophils, and neutrophils (Wu et al). In Jurkat cells, binding of TECK to CCL9 has been shown to increase levels of intracellular calcium (Cheng-Rong et al). TECK/CCR9 signaling has also been linked to many cancers, as these molecules have been shown to mediate anti-apoptotic processes by activating the PI3K/AKT signaling pathway, weakening the effect of cytotoxic T cells by regulating STAT signaling. Additionally, TECK induces metastasis by increasing the expression of MMP2 and MMP9 (Tu et al.).

Product Information

Alternative Names:	C-C motif chemokine 25, CCL25, Chemokine TECK, Ckb15, MGC150327, SCYA25, Small-inducible cytokine A25, Thymus-expressed chemokine
Accession Number:	O35903
Amino Acid Sequence:	MQGAFEDCCL GYQHRIKWNV LRHARNYHQQ EVSGSCNLRA VRFYFRQKVV CGNPEDMNVK RAMRILTARK RLVHWKSASD SQTERKKSNH MKSKVENPNS TSVRSATLGH PRMVMMPRKT NN
Predicted Molecular Mass:	14.3 kDa
Species:	Mouse
Cross Reactivity:	Reported to be species-specific
Formulation:	Lyophilized after dialysis against phosphate-buffered saline.
Source:	E. coli

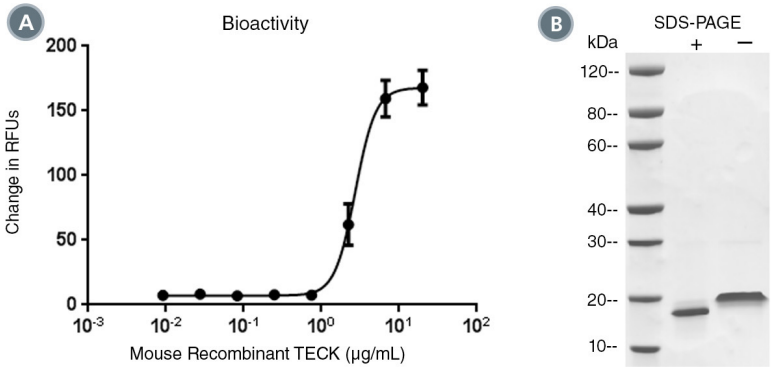
Specifications

Activity:	The specific activity is ≥ 2 x 10^2 units/mg (EC50 ≤ 5 µg/mL) as determined by a Ca2+ mobilization assay using CHO-K1 cells expressing human Gα15 and mouse CXCR3.
Purity:	≥ 98%
Endotoxin Level:	Measured by kinetic Limulus amebocyte lysate (LAL) analysis and is ≤ 0.2 EU/µg protein.

Preparation and Storage

Storage:	Store at -80°C.
Stability:	Stable as supplied for 12 months from date of receipt.
Preparation:	Centrifuge vial before opening. Reconstitute the product in sterile water or phosphate-buffered saline to at least 0.1 mg/mL by pipetting the solution down the sides of the vial. Do not vortex. OPTIONAL: After reconstitution, if product will not be used immediately, dilute with concentrated bovine serum albumin (BSA) to a final BSA concentration of 0.1%. The effect of storage of stock solution on product performance should be tested for each application. As a general guide, do not store at 2 - 8°C for more than 1 week or at -20°C to -80°C for more than 3 months. Avoid repeated freeze-thaw cycles.

Data



(A) The biological activity of Mouse Recombinant TECK (CCL25) was tested using a Ca2+ mobilization assay in CHO-K1 cells stably expressing Gα15 and CXCR3. Calcium mobilization was measured using a fluorometric assay method. The EC50 is defined as the effective concentration of the growth factor at which calcium mobilization is at 50% of maximum. The EC50 in the example above is less than 5 µg/mL.
(B) 2 µg of Mouse Recombinant TECK (CCL25) was resolved with SDS-PAGE under reducing (+) and non-reducing (-) conditions and visualized by Coomassie Blue staining. Mouse Recombinant TECK (CCL25) has a predicted molecular mass of 14.3 kDa.

Related Products

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References

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