

Product Information

6Ckine, mouse recombinant, expressed in *E. coli*

Catalog Number **C0845**
Storage Temperature $-20\text{ }^{\circ}\text{C}$

CAS RN 196414-88-7
Synonyms: Exodus-2, secondary lymphoid-tissue chemokine (SLC)

Product Description

Mouse 6Ckine is β - or C-C chemokine identified in the Expressed Sequence Tag (EST) database by three independent groups. It contains four conserved cysteine (C) residues, which are characteristic of β -chemokines. Two additional conserved cysteine residues have been found in its unusually long carboxy-terminal domain and consequently the name 6Ckine.¹⁻³

Human and mouse 6Ckine are highly conserved and show 86% amino acid homology.¹ Mouse 6Ckine cDNA encodes a 133 amino acid precursor protein, a 23 amino acid signal peptide, and a 110 amino acid mature protein.¹ Comparatively, human 6Ckine cDNA encodes a 134 amino acid precursor protein, a 23 amino acid signal peptide, and a 111 amino acid mature protein.^{1,3}

The expression of mouse 6Ckine has been detected in high levels in the spleen and lung.³ Recombinant mouse 6Ckine is chemotactic *in vitro* for thymocytes and activated T-cells.¹ Unlike other C-C chemokines, 6Ckine is not chemotactic for monocytes and neutrophils.^{1,3} A growing body of work suggests 6Ckine influences lymphocyte homing to secondary lymphoid organs,⁴ integrin-mediated lymphocyte adhesion,⁵ and may act via the EBI1 ligand chemokine (ELC) receptor, CCR7.^{6,7}

This recombinant product is lyophilized from a 0.2 μm filtered solution.

Molecular mass: The 110 amino acid mature protein has a predicted molecular mass of 12 kDa. An apparent mass of 16–17 kDa is observed in SDS-PAGE.

Purity: $\geq 98\%$ (SDS-PAGE and HPLC)

Endotoxin: $\leq 0.1\text{ ng}/\mu\text{g}$ (LAL)

Biological activity is determined by its ability to chemoattract total murine T cell population using a concentration range of 10.0–100 ng/ml.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Reconstitute the contents of the vial using sterile balanced salt solution or medium containing a minimum of 0.1% BSA or other carrier protein. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (0.1% BSA) and store in working aliquots at $-20\text{ }^{\circ}\text{C}$ to $-80\text{ }^{\circ}\text{C}$.

Storage/Stability

The lyophilized protein remains active at room temperature for up to 1 month. Working aliquots stored with a carrier protein remain active for at least 3 months at $-20\text{ }^{\circ}\text{C}$ to $-80\text{ }^{\circ}\text{C}$. Avoid repeated freeze/thaw cycles.

References

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4. Gunn, M.D. et al., *Proc. Natl Acad. Sci. USA*, **95**(1), 258-263 (1998).
5. Pachynski, R.K. et al., *J. Immunol.*, **161**(2), 952-956 (1998).
6. Willimann, K. et al., *Eur. J. Immunol.*, **28**(6), 2025-2034 (1998).
7. Yoshida, R. et al., *J. Biol. Chem.*, **273**(12), 7118-7122 (1998).
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