

## Product Information

### **6Ckine** **Human Recombinant,** **Expressed in *E. coli***

Product Number **C 0720**

#### **Product Description**

Human 6Ckine is a  $\beta$ - or C-C chemokine identified in the Expressed Sequence Tag (EST) database by three independent groups.<sup>1,2,3</sup> Known also as Exodus-2 and secondary lymphoid-tissue chemokine (SLC), it contains four conserved cysteine (C) residues which are characteristic of  $\beta$ -chemokines.<sup>1,2,3</sup> Two additional conserved cysteine residues have been found in its unusually long carboxy-terminal domain and consequently the name 6Ckine.<sup>1,2,3</sup>

Human and mouse 6Ckine are highly conserved and show 86% amino acid homology.<sup>1</sup> Human 6Ckine cDNA encodes a 134 amino acid precursor protein, a 23 amino acid signal peptide and a 111 amino acid mature protein.<sup>1,3</sup> It shares 21-33% homology with other human C-C chemokines.<sup>1</sup> Comparatively, mouse 6Ckine cDNA encodes a 133 amino acid precursor protein, a 23 amino acid signal peptide and a 110 amino acid mature protein.<sup>1</sup>

The human 6Ckine gene has been mapped at chromosome 9p13.<sup>3,5</sup> The expression of human 6Ckine has been detected primarily in lymphoid tissues but also in the gastrointestinal tract.<sup>2,3,4,5,6</sup> Recombinant human 6Ckine is chemotactic for some human T-cell lines, resting peripheral blood lymphocytes, and normal cultured T-cells treated with PHA and IL-2.<sup>3,4</sup> Unlike other C-C chemokines, 6Ckine is not chemotactic for monocytes and neutrophils.<sup>1,3</sup> A growing body of work suggests that 6Ckine influences lymphocyte homing to secondary lymphoid organs<sup>6</sup>, integrin-mediated lymphocyte adhesion<sup>8</sup> and may act via the EB11 ligand chemokine (ELC) receptor, CCR7.<sup>4,5</sup>

#### **Reagents**

Lyophilized from a solution containing 30% acetonitrile, 0.1% trifluoroacetic acid (pH 2.0), and 50  $\mu$ g BSA/  $\mu$ g chemokine as a carrier protein.

#### **Storage/Stability**

Store the lyophilized powder at  $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$ . Sterile reconstituted solution can be stored at  $2-4^{\circ}\text{C}$  for maximum of 1 month. For extended storage, freeze in working aliquots at  $-20^{\circ}\text{C}$  approximately 3 months. Repeated freezing and thawing are not recommended.

#### **Product Profile**

Recombinant human 6Ckine has been tested in a chemotaxis assay using human lymphocytes cultured 5-10 days. The ED<sub>50</sub> value is defined as the effective concentration of chemokine that elicits 50% response in a cell-based bioassay.

#### **Reconstitution**

Reconstitute the contents of the vial using sterile balanced salt solution containing a minimum of 0.1% BSA or human serum albumin (HSA) to a stock concentration of no less than 10  $\mu$ g/ml. Additional filtration of the stock solution is not recommended as this may result in loss of product due to adsorption onto the filter membrane.

#### **References**

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