

Rev03
Update: Dec,14,2021

DATASHEET

Fractalkine/CX3CL1, Human

Cat. No.: Z02828

Product Introduction

Species	Human
Protein Construction	CX3CL1 (Gln25-Gly100) Accession # P78423
Purity	> 97% as analyzed by SDS-PAGE > 97% as analyzed by HPLC
Endotoxin Level	< 1 EU/μg of protein by LAL method
Biological Activity	Fully biologically active when compared to standard. The biological activity determined by a chemotaxis bioassay using human T-lymphocytes is in a concentration of 5.0-10.0 ng/ml.
Expression System	E. coli
Theoretical Molecular Weight	8.6 kDa
Formulation	Lyophilized from a 0.2 μm filtered solution in 20 mM PB, pH 7.4, 50 mM NaCl.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

Background

Target Background : Fractalkine, also named neurotactin, is a novel chemokine recently identified through bioinformatics. Fractalkine has a unique C-X3-C cysteine motif near the amino-terminus and is the first member of a fourth branch of the chemokine superfamily. Unlike other known chemokines, fractalkine is a type 1 membrane protein containing a chemokine domain tethered on a long mucin-like stalk. Human fractalkine cDNA encodes a 397 amino acid (aa) residue membrane protein with a 24 aa residue predicted signal peptide, a 76 aa residue chemokine domain, a 241 aa residue stalk region containing 17 degenerate mucin-like repeats, a 19 aa residue transmembrane segment and a 37 aa residue cytoplasmic domain. The extracellular domain of human fractalkine can be released, possibly by proteolysis at the dibasic cleavage site proximal to the membrane, to generate soluble fractalkine. The soluble chemokine domain of human fractalkine was reported to be chemotactic for T cells and monocytes while the soluble chemokine domain of mouse fractalkine was reported to chemoattract neutrophils and T-lymphocytes but not monocytes.

Synonyms : CX3CL1; ABCD-3; C3Xkine; CXC3; CXC3C; NTN; NTT; SCYD1; fractalkine; neurotactin; C-X3-C motif chemokine ligand 1

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