

DESCRIPTION

Source *E. coli*-derived mouse CCL27/CTACK protein
Leu26-Asn120
Accession # NP_035466

N-terminal Sequence Analysis Leu26

Predicted Molecular Mass 10.9 kDa

SPECIFICATIONS

Activity Measured by its ability to chemoattract BaF3 mouse pro-B cells transfected with mouse CCR10. The ED₅₀ for this effect is 0.150-1.50 µg/mL.

Endotoxin Level <1.0 EU per 1 µg of the protein by the LAL method.

Purity >97%, by SDS-PAGE under reducing conditions and visualized by silver stain.

Formulation Lyophilized from a 0.2 µm filtered solution in Acetonitrile and TFA with BSA as a carrier protein. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 100 µg/mL in sterile PBS containing at least 0.1% human or bovine serum albumin.

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

CCL27, also known as CTACK (cutaneous T cell-attracting chemokine), ALP, ILC, and ESkin, is a member of the CC family of chemokines (1). Mature mouse CCL27 is a 95 amino acid (aa) protein that shares 57% aa and 87% aa sequence identity with human and rat CCL27, respectively (2). It shares 18%-31% aa sequence identity with other mouse CC chemokines. An alternately spliced form of mouse CCL27, known as PESKY, is localized to the nucleus and promotes cellular migration (3). CCL27 is constitutively expressed by keratinocytes and is upregulated by inflammatory stimuli and in wounded skin (4-7). CCL27 binds the chemokine receptor CCR10, glycosaminoglycans in the extracellular matrix, sulfated tyrosine residues on PSGL-1, and determinants on the surface of fibroblasts and endothelial cells (5, 7-9). CCL27 cooperates with CCL17/TARC in inducing the migration of cutaneous lymphocyte antigen (CLA) positive memory T cells to the skin during inflammation (4, 6, 10-12). Endothelial cell-bound CCL27 can mediate the adhesion of those cells to CLA⁺ T cells (6). CCL27 also induces the migration of keratinocyte precursors from bone marrow to the skin, thereby promoting wound healing (7). In humans, serum CCL27 levels are elevated and correlate with disease severity in atopic dermatitis, psoriasis vulgaris, and mycosis fungoides (13-15).

References:

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