

DESCRIPTION

Source *E. coli*-derived
Phe25-Gly112
Accession # Q9Y4X3.1

N-terminal Sequence Analysis Phe25

Predicted Molecular Mass 10.1 kDa

SPECIFICATIONS

Activity Measured by its ability to chemoattract BaF3 mouse pro-B cells transfected with human CCR10. The ED₅₀ for this effect is typically 0.1–0.4 µg/mL.

Endotoxin Level <0.10 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 human CCL27 is an 88 amino acid (aa) protein that shares 57% aa sequence identity with mouse and rat CCL27 (2). It shares 11% - 35% aa sequence identity with other human 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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