

PRODUCT INFORMATION



Tetrapeptide GEKG (trifluoroacetate salt)

Item No. 45775

Formal Name: glycyl-L- α -glutamyl-L-lysyl-glycine, trifluoroacetate salt

Synonyms: L-Gly-L-Glu-L-Lys-L-Gly, Tetrapeptide 21

Peptide Sequence: GEKG-OH

MF: $C_{15}H_{27}N_5O_7 \cdot XCF_3COOH$

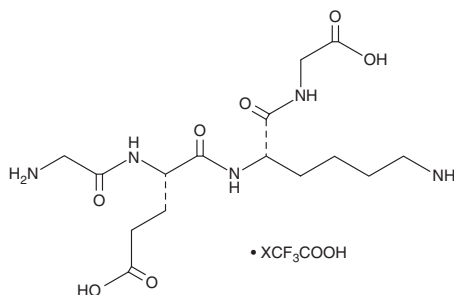
FW: 389.4

Purity: $\geq 98\%$

Supplied as: A solid

Storage: -20°C

Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Tetrapeptide GEKG (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the tetrapeptide GEKG (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Tetrapeptide GEKG (trifluoroacetate salt) is sparingly soluble (1-10 mg/ml) in DMSO.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of tetrapeptide GEKG (trifluoroacetate salt) can be prepared by directly dissolving the solid in aqueous buffers. Tetrapeptide GEKG (trifluoroacetate salt) is sparingly soluble (1-10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

Tetrapeptide GEKG is a peptide corresponding to amino acids 167-170 of human collagen IV.¹ It increases the expression of the extracellular matrix (ECM) factors collagen I, hyaluronan synthase 1, and fibronectin in primary human dermal fibroblasts (HDFs).² Tetrapeptide GEKG (1 and 10 ppm) induces the secretion of procollagen from HDFs. It also increases the viability of HDFs with a synergistic effect when used in combination with injectable platelet-rich fibrin (i-PRF).¹ Formulations containing tetrapeptide GEKG have been used in cosmetics.

References

1. Paccola, A.G.L., Santos, T.M.C.D., Minelo, M.C., *et al.* Synergistic effects of injectable platelet-rich fibrin and bioactive peptides on dermal fibroblast viability and extracellular matrix gene expression: An *in vitro* study. *Molecules* **30**(16), 3415 (2025).
2. Farwick, M., Grether-Beck, S., Marini, A., *et al.* Bioactive tetrapeptide GEKG boosts extracellular matrix formation: *In vitro* and *in vivo* molecular and clinical proof. *Exp. Dermatol.* **20**(7), 602-604 (2011).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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