

PRODUCT INFORMATION



Gap 27 (trifluoroacetate salt)

Item No. 35124

Formal Name: L-seryl-L-arginyl-L-prolyl-L-threonyl-L- α -glutamyl-L-lysyl-L-threonyl-L-isoleucyl-L-phenylalanyl-L-isoleucyl-L-isoleucine, trifluoroacetate salt
⁴³Gap27, SRPTEKTIFII

Synonyms:

MF: C₆₀H₁₀₁N₁₅O₁₇ • XCF₃COOH

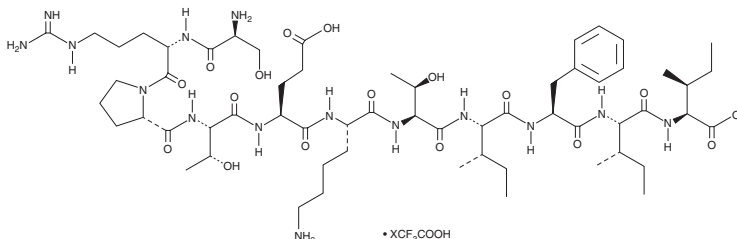
FW: 1,304.6

Purity: ≥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

Gap 27 (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the Gap 27 (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Gap 27 (trifluoroacetate salt) is slightly soluble in ethanol, methanol, and DMSO.

Description

Gap 27 is a connexin-mimetic peptide that corresponds to amino acids 204-214 of extracellular loop 2 in connexin 43.¹ It reduces survival of isolated rat osteoclasts when used at a concentration of 500 μ M and decreases bone resorption in rat bone slice and osteoclast co-cultures.² Gap 27 accelerates wound closure and stratification of the corneal epithelium in isolated human corneas.³ *In vivo*, Gap 27 reduces cardiac remodeling and the incidence of cardiac arrhythmias in a rat model of arterio-venous fistula (AV-shunt) surgery-induced high-output heart failure.⁴

References

1. Wright, C.S., Pollok, S., Flint, D.J., *et al.* The connexin mimetic peptide Gap27 increases human dermal fibroblast migration in hyperglycemic and hyperinsulinemic conditions in vitro. *J. Cell. Physiol.* **227**(1), 77-87 (2012).
2. Ilvesaro, J., Tavi, P., and Tuukkanen, J. Connexin-mimetic peptide Gap 27 decreases osteoclastic activity. *BMC Musculoskelet. Disord.* **2**, 10 (2001).
3. Elbadawy, H.M., Mirabelli, P., Xeroudaki, M., *et al.* Effect of connexin 43 inhibition by the mimetic peptide Gap27 on corneal wound healing, inflammation and neovascularization. *Br. J. Pharmacol.* **173**(19), 2880-93 (2016).
4. Lucero, C.M., Andrade, D.C., Toledo, C., *et al.* Cardiac remodeling and arrhythmogenesis are ameliorated by administration of Cx43 mimetic peptide Gap27 in heart failure rats. *Sci. Rep.* **10**(1), 6878 (2020).

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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