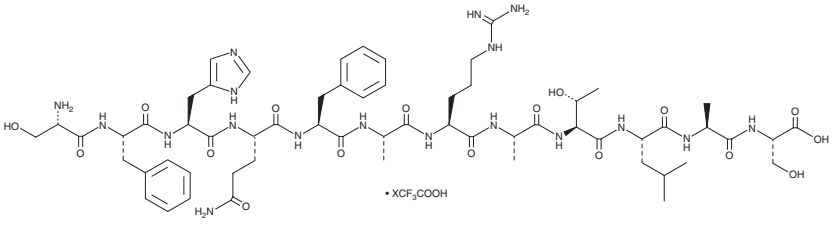
PRODUCT INFORMATION

HAP-1 (trifluoroacetate salt)

Item No. 45762

Formal Name:	L-seryl-L-phenylalanyl-L-histidyl-L-glutaminyl-L-phenylalanyl-L-alanyl-L-arginyl-L-alanyl-L-threonyl-L-leucyl-L-alanyl-L-serine, trifluoroacetate salt
Peptide Sequence:	SFHQFARATLAS-OH
MF:	$C_{60}H_{90}N_{18}O_{17} \bullet XCF_3COOH$
FW:	1,335.5
Purity:	≥95%
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

HAP-1 (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the HAP-1 (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. HAP-1 (trifluoroacetate salt) is soluble (≥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 HAP-1 (trifluoroacetate salt) can be prepared by directly dissolving the solid in aqueous buffers. HAP-1 (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

HAP-1 is a synovial fibroblast-targeting peptide.[1] It has been conjugated to the antimicrobial peptide $(KLAK)_2$ to generate a pro-apoptotic peptide, which decreases synovial leukocyte infiltration in a rabbit model of rheumatoid arthritis when administered intra-articularly. HAP-1 has also been conjugated to liposomes for the selective delivery of an NF-κB inhibitory peptide to inflamed synovium in a rat model of rheumatoid arthritis.[2]

References

1. Mi, Z., Lu, X., Mai, J.C., *et al*. Identification of Identification of a synovial fibroblast-specific protein transduction domain for delivery of apoptotic agents to hyperplastic synoviuma synovial fibroblast-specific protein transduction domain for delivery of apoptotic agents to hyperplastic synovium. *Mol. Ther.* **8(2)**, 295-305 (2003).
2. You, C., Zu, J., Liu, X., *et al*. Synovial fibroblast-targeting liposomes encapsulating an NF-κB-blocking peptide ameliorates zymosan-induced synovial inflammation. *J. Cell. Mol. Med.* **22(4)**, 2449-2457 (2018).

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