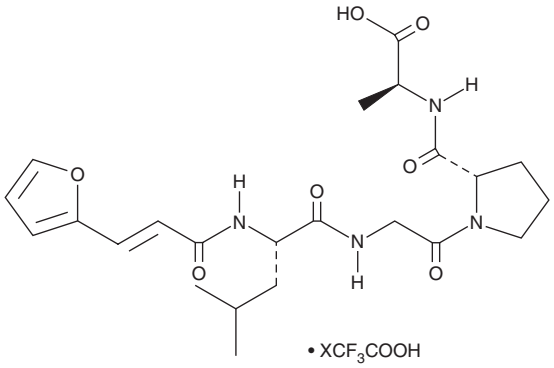
PRODUCT INFORMATION

FALGPA (trifluoroacetate salt)

Item No. 37374

Formal Name:	N-[3-(2-furanyl)-1-oxo-2-propen-1-yl]-L-leucylglycyl-L-prolyl-L-alanine, trifluoroacetate salt
Synonyms:	2-Furanacryloyl-L-leucylglycyl-L-prolyl-L-alanine, 2-Furanacryloyl-Leu-Gly-Pro-Ala-OH
Peptide Sequence:	Fa-LGPA-OH (Fa = furanacryloyl)
MF:	$C_{23}H_{32}N_4O_7 \bullet XCF_3COOH$
FW:	476.5
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

FALGPA (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the FALGPA (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. FALGPA (trifluoroacetate salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of FALGPA (trifluoroacetate salt) in these solvents is approximately 30 mg/ml.

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 FALGPA (trifluoroacetate salt) can be prepared by directly dissolving the solid in aqueous buffers. FALGPA (trifluoroacetate salt) is slightly soluble in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

FALGPA is a colorimetric substrate for collagenase.[1,2] It is selective for collagenase over trypsin, thermolysin, and elastase.[1] Collagenase preferentially binds to and cleaves the Leu-Gly (LG) peptide sequence to release the furanacryloyl group, which can be quantified by colorimetric detection at 324 to 345 nm as a measure of collagenase activity. FALGPA has been used to identify inhibitors of *C. histolyticum* collagenase.[3]

References

1. Van Wart, H.E. and Steinbrink, D.R. A continuous spectrophotometric assay for *Clostridium histolyticum* collagenase. *Anal. Biochem.* **113(2)**, 356-365 (1981).
2. Jackson, R.J., Dao, M.L., and Lim, D.V. Modified FALGPA assay for cell-associated collagenolytic activity. *J. Microbiol. Methods* **21(2)**, 209-215 (1995).
3. Yiotakis, A., Hatgiyannacou, A., Dive, V., *et al.* New thiol inhibitors of *Clostridium histolyticum* collagenase. Importance of the P3' position. *Eur. J. Biochem.* **172(3)**, 761-766 (1988).

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