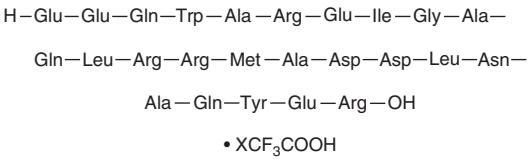
# PRODUCT INFORMATION

## PUMA BH3 (human) (trifluoroacetate salt)

*Item No. 37509*

**Formal Name:** L-α-glutamyl-L-α-glutamyl-L-glutaminyl-L-tryptophyl-L-alanyl-L-arginyl-L-α-glutamyl-L-isoleucylglycyl-L-alanyl-L-glutaminyl-L-leucyl-L-arginyl-L-arginyl-L-methionyl-L-alanyl-L-α-aspartyl-L-α-aspartyl-L-leucyl-L-asparaginyl-L-alanyl-L-glutaminyl-L-tyrosyl-L-α-glutamyl-L-arginine, trifluoroacetate salt

**Peptide Sequence:** EEQWAREIGAQLRRMADDLNAQYER-OH




**MF:** $C_{128}H_{202}N_{42}O_{43}S \bullet XCF_3COOH$

**FW:** 3049.3

**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

PUMA BH3 (human) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the PUMA BH3 (human) (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. PUMA BH3 (human) (trifluoroacetate salt) is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of PUMA BH3 (human) (trifluoroacetate salt) in these solvents is approximately 10 and 5 mg/ml, respectively.

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 PUMA BH3 (human) (trifluoroacetate salt) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of PUMA BH3 (human) (trifluoroacetate salt) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

PUMA BH3 is a peptide comprising the BH3 domain of p53-upregulated modulator of apoptosis (PUMA) and an activator of the pro-apoptotic protein Bak.[1] PUMA BH3 binds to Bak ($K_d$s = 290 and 26 nM in HEPES and CHAPS buffer, respectively) and induces Bak homo-oligomerization and Bak-mediated membrane permeabilization.

### Reference


1. Dai, H., Pang, Y.-P., Ramirez-Alvarado, M., *et al.* Evaluation of the BH3-only protein Puma as a direct Bak activator. *J. Biol. Chem.* **289(1),** 89-99 (2014).





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