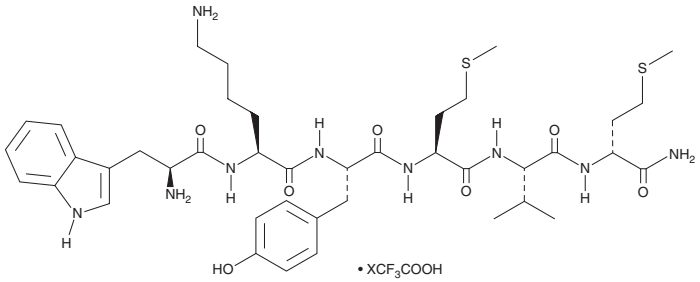
PRODUCT INFORMATION

WKYMVm (trifluoroacetate salt)

Item No. 33589

Formal Name:	L-tryptophyl-L-lysyl-L-tyrosyl-L-methionyl-L-valyl-D-methioninamide, trifluoroacetate salt
Synonym:	Trp-Lys-Tyr-Met-Val-D-Met
MF:	$C_{41}H_{61}N_9O_7S_2 \bullet XCF_3COOH$
FW:	856.1
Purity:	≥98%
UV/Vis.:	λ_{max}: 219 nm
Supplied as:	A solid
Storage:	-20°C
Stability:	≥3 years



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

Laboratory Procedures

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

WKYMVm (trifluoroacetate salt) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, WKYMVm (trifluoroacetate salt) should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. WKYMVm (trifluoroacetate salt) has a solubility of approximately 0.20 mg/ml in a 1:4 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

WKYMVm is a synthetic peptide agonist of formyl peptide receptor 1 (FPR1) and FPR2, which was previously known as formyl peptide receptor-like 1 (FPRL1).[1-3] It induces calcium mobilization in ETFR rat basophilic leukemia cells transfected with FPR1 or FPR2 when used at a concentration of 0.1 nM.[1] WKYMVm stimulates chemotaxis of monocytes, dendritic cells, and natural killer (NK) cells, as well as induces superoxide production in monocytes and neutrophils, *in vitro*.[3] *In vivo*, WKYMVm (8 mg/kg) reverses mucosal destruction, decreases in body weight, and colonic shortening in a mouse model of colitis induced by dextran sulfate (sodium salt) (DSS; Item No. 23250). Topical application of WKYMVm stimulates angiogenesis and accelerates re-epithelialization and granulation tissue formation in a rat model of diabetic cutaneous wounds.[2]

References

1. Le, Y., Gong, W., Li, B., *et al. J. Immunol.* **163(12)**, 6777-6784 (1999).
2. Kwon, Y.W., Heo, S.C., Jang, I.H., *et al. Wound Repair Regen.* **23(4)**, 575-582 (2015).
3. Kim, S.D., Kwon, S., Lee, S.K., *et al. Exp. Mol. Med.* **45(9)**, e40 (2013).

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.

WARRANTY AND LIMITATION OF REMEDY
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