

WKYMVM 2TFA(187986-17-0(free base))

Chemical Properties

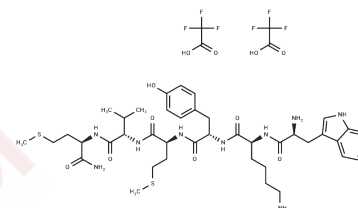
CAS No. :

Formula: C45H63F6N9O11S2

Molecular Weight: 1084.16

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	WKYMVM 2TFA is a N-formyl peptide receptor (FPR1) agonist.
Targets(IC50)	Others
In vitro	Neutrophils are activated by WKYMVM through FPRL1 and that FPRL2 is a chemotactic receptor transducing signals in myeloid cells[1].
In vivo	Using blood samples withdrawn from 28 AL patients and 31 healthy controls, found that, in the absence of exogenous WKYMVM, WKYMVM receptor and bactericidal activity did not differ between patients and controls. Addition of WKYMVM markedly increased the bactericidal activities of these cells in a dose-dependent manner. During induction chemotherapy, there were significant increases in bactericidal activity in the presence and absence of 1nM WKYMVM, with higher bactericidal activities at the time of complete remission than at the time of diagnosis or on day 15. During consolidation chemotherapy, WKYMVM had no effect on bactericidal activities. Patients showed significant increase in the concentrations of TNF alpha, IL-1b, IL-6 and IL-8, but significant decrease in the concentrations of IL-2, IL-4 and IL-12. TNF alpha, IL-1b and IL-6 showed significant negative correlations with bactericidal activities of patient neutrophils at time of diagnosis, and IL-4 showed a significant positive correlation with bactericidal activities, these findings indicate that WKYMVM enhances bactericidal activity in patients with AL[2].

Solubility Information

Solubility	DMSO: 255 mg/mL (235.21 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.9224 mL	4.6119 mL	9.2237 mL
5 mM	0.1845 mL	0.9224 mL	1.8447 mL
10 mM	0.0922 mL	0.4612 mL	0.9224 mL
50 mM	0.0184 mL	0.0922 mL	0.1845 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Christophe T , Karlsson A , Dugave C , et al. The Synthetic Peptide Trp-Lys-Tyr-Met-Val-Met-NH₂ Specifically Activates Neutrophils through FPRL1/Lipoxin A4 Receptors and Is an Agonist for the Orphan Monocyte-expressed Chemoattractant Receptor FPRL2[J]. *Journal of Biological Chemistry*, 2001, 276(24):21585-21593.

Kim H , Noh E K , Lee E J , et al. Enhanced bactericidal function by WKYMVm in patients with acute leukemia[J]. *Leukemia Research*, 2008, 32(5):717-725.

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