

Fz7-21 TFA

Cat. No.:	HY-P1454A		
Molecular Formula:	C ₈₅ H ₁₁₅ N ₁₈ F ₃ O ₂₅ S ₂		
Molecular Weight:	1910.07		
Sequence:	Ac-Leu-Pro-Ser-Asp-Asp-Leu-Glu-Phe-Trp-Cys-His-Val-Met-Tyr-NH ₂	Ac-LPSDDLEFWCHVMY-NH ₂ (TFA salt)	
Sequence Shortening:	Ac-LPSDDLEFWCHVMY-NH ₂		
Target:	Wnt		
Pathway:	Stem Cell/Wnt		
Storage:	Powder	-80°C	2 years
		-20°C	1 year
	In solvent	-80°C	6 months
		-20°C	1 month

SOLVENT & SOLUBILITY

In Vitro	DMSO : 33.33 mg/mL (17.45 mM; Need ultrasonic)					
	H ₂ O : < 0.1 mg/mL (insoluble)					
	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
		Concentration				
		1 mM		0.5235 mL	2.6177 mL	5.2354 mL
5 mM			0.1047 mL	0.5235 mL	1.0471 mL	
	10 mM		0.0524 mL	0.2618 mL	0.5235 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (1.31 mM); Suspended solution; Need ultrasonic					
	2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (1.31 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	Fz7-21 (Ac-LPSDDLEFWCHVMY-NH ₂) TFA, a peptide antagonist of Frizzled 7 (FZD 7) receptors, selectively binds to FZD7 CRD subclass. The EC ₅₀ values are 58 and 34 nM for human and mouse FZD7 CRD, respectively. Fz7-21 impairs Wnt/β-catenin signaling in HEK293 cells stimulated with exogenous WNT3A (IC ₅₀ =100 nM) or transfected with a construct expressing WNT3A or WNT1. Fz7-21 also blocks WNT3A-mediated stabilization of β-catenin in mouse L cells (IC ₅₀ =50 nM) ^[1] .
IC₅₀ & Target	EC ₅₀ : 58 nM (human FZD7 CRD), 34 nM (mouse FZD7 CRD) ^[1]

REFERENCES

[1]. Nile AH, et al. Publisher Correction: A selective peptide inhibitor of Frizzled 7 receptors disrupts intestinal stem cells. Nat Chem Biol. 2018 Sep;14(9):902.

Caution: Product has not been fully validated for medical applications. For research use only.

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