MCE ® MedChemExpress

Product Data Sheet

NLS-StAx-hTFA

Cat. No.: HY-P2272A

Molecular Formula: $C_{162}H_{276}F_3N_{55}O_{31}$

Molecular Weight: 3559.28

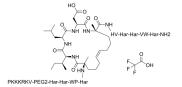
Target: β -catenin; Wnt Pathway: Stem Cell/Wnt

Storage: Sealed storage, away from moisture and light, under nitrogen

Powder -80°C 2 years -20°C 1 year

 * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture

and light, under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (28.10 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	0.2810 mL	1.4048 mL	2.8096 mL
	5 mM	0.0562 mL	0.2810 mL	0.5619 mL
	10 mM	0.0281 mL	0.1405 mL	0.2810 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description NLS-StAx-h TFA is a selective, cell permeable, stapled peptide Wnt signaling inhibitor with an IC₅₀ of 1.4 μM. NLS-StAx-h TFA efficiently inhibits β -catenin-transcription factor interactions. NLS-StAx-h TFA shows anti-proliferation of cancer cells^{[1][2]}.

IC $_{50}$ & Target $\hspace{1.5cm} \text{IC}_{50}\text{: } 1.4~\mu\text{M (Wnt)}^{[1]}$

In Vitro ${\sf NLS-StAx-h} \ (10\ \mu M; 72\ h) \ inhibits \ proliferation \ of \ colorectal \ cancer \ cells^{[1]}.$

NLS-StAx-h (5 and 10 μ M; 24 h) inhibits migration of colorectal cancer cells^[1].

 $\label{eq:mce} \mbox{MCE has not independently confirmed the accuracy of these methods. They are for reference only.}$

Cell Proliferation Assay^[1]

Cell Line:	SW-480 and DLD-1 cells
Concentration:	10 μΜ
Incubation Time:	72 hr

Result:	Reduced the viability of both SW-480 and DLD-1 by more than 80%.		
Cell Migration Assay ^[1]			
Cell Line:	DLD-1 cells		
Concentration:	5 and 10 μM		
Incubation Time:	24 hr		
Result:	Resulted in dose-dependent inhibition of wound closure (wound closure: 52% at 5 μ M, and 24% at 10 μ M).		

REFERENCES

[1]. Dietrich L, et al. Cell Permeable Stapled Peptide Inhibitor of Wnt Signaling that Targets β-Catenin Protein-Protein Interactions. Cell Chem Biol. 2017 Aug 17;24(8):958-968.e5.

[2]. Wang Z, et al. Direct targeting of β -catenin in the Wnt signaling pathway: Current progress and perspectives. Med Res Rev. 2021 Jul;41(4):2109-2129.

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

Tel: 609-228-6898

Fax: 609-228-5909

 $\hbox{E-mail: tech@MedChemExpress.com}$

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA