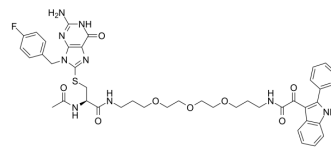


AUTAC4

Cat. No.:	HY-134640
CAS No.:	2267315-04-6
Molecular Formula:	C ₄₃ H ₄₈ FN ₉ O ₈ S
Molecular Weight:	869.96
Target:	AUTACs; Mitophagy
Pathway:	PROTAC; Autophagy
Storage:	-20°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 170 mg/mL (195.41 mM; Need ultrasonic)						
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg	
				1 mM	1.1495 mL	5.7474 mL	11.4948 mL
				5 mM	0.2299 mL	1.1495 mL	2.2990 mL
				10 mM	0.1149 mL	0.5747 mL	1.1495 mL
Please refer to the solubility information to select the appropriate solvent.							
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 4.25 mg/mL (4.89 mM); Clear solution						
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 4.25 mg/mL (4.89 mM); Clear solution						
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 4.25 mg/mL (4.89 mM); Clear solution						

BIOLOGICAL ACTIVITY

Description	AUTAC4 is a mitochondria-targeting autophagy-targeting chimera (AUTAC). AUTAC4 downregulates cytosolic proteins and promotes targeted mitochondrial turnover via mitophagy ^[1] .
In Vitro	AUTAC4 induces K63-linked polyubiquitination. Accumulation of K63-linked polyubiquitin required approximately 8 h of incubation ^[1] . AUTAC4 suppresses not only cytochrome c release into the cytosol but also pro-caspase 3 cleavage. The intracellular ATP level after CCCP treatment is also maintained by AUTAC4, suggesting that mitophagy acceleration by AUTAC4 restored energy production by improving mitochondrial quality control. AUTAC4 rescues cells with acute mitochondrial injury by promoting mitophagy ^[1] .

With the use of mito-Rosella, AUTAC4 (10 μ M) can induce mitophagy in Detroit 532 cells ~24-72 h after treatment^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Daiki Takahashi, et al. AUTACs: Cargo-Specific Degraders Using Selective Autophagy. Mol Cell. 2019 Dec 5;76(5):797-810.e10.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

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