Data Sheet (Cat.No.T14553)



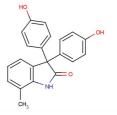
BHPI

Chemical Properties

CAS No.: 56632-39-4 Formula: C21H17NO3

Molecular Weight: 331.36
Appearance: N/A

Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).



Biological Description

Description	BHPI is a potent inhibitor of nuclear estrogen–ER α -regulated gene expression. Elicits sustained ER α -dependent activation of the endoplasmic reticulum (EnR) stress sensor, the unfolded protein response (UPR), and persistent inhibition of protein synthesis. IC50 value: Target: ER α inhibitor BHPI is effective because it elicits sustained ER α -dependent activation of the endoplasmic reticulum (EnR) stress sensor, the unfolded protein response (UPR), and persistent inhibition of protein synthesis. In ER α (+) cancer cells, BHPI rapidly hyperactivates plasma membrane PLC γ , generating inositol 1,4,5-triphosphate (IP3), which opens EnR IP3R calcium channels, rapidly depleting EnR Ca(2+) stores. BHPI distorts a newly described action of estrogen-ER α : mild and transient UPR activation. In contrast, BHPI elicits massive and sustained UPR activation, converting the UPR from protective to toxic.
Targets(IC ₅₀)	Others: None

Solubility Information

Solubility	DMSO: 150 mg/mL (452.68 mM)	
	(< 1 mg/ml refers to the product slightly soluble or insoluble)	

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.018 mL	15.089 mL	30.179 mL
5 mM	0.604 mL	3.018 mL	6.036 mL
10 mM	0.302 mL	1.509 mL	3.018 mL
50 mM	0.06 mL	0.302 mL	0.604 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Andruska ND, et al. Estrogen receptor α inhibitor activates the unfolded protein response, blocks protein synthesis, and induces tumor regression. Proc Natl Acad Sci U S A. 2015 Apr 14;112(15):4737-42.

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