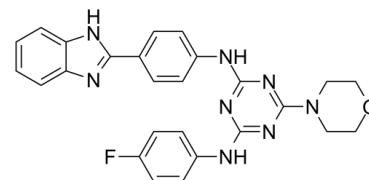


Data Sheet

Product Name:	IITZ-01
Cat. No.:	CS-0067546
CAS No.:	1807988-47-1
Molecular Formula:	C ₂₆ H ₂₃ FN ₈ O
Molecular Weight:	482.51
Target:	Apoptosis; Autophagy; PI3K
Pathway:	Apoptosis; Autophagy; PI3K/Akt/mTOR
Solubility:	H ₂ O : < 0.1 mg/mL (insoluble); DMSO : 150 mg/mL (310.87 mM); Need ultrasonic)



BIOLOGICAL ACTIVITY:

IITZ-01 is a potent lysosomotropic **autophagy** inhibitor with single-agent antitumor activity, with an **IC₅₀** of 2.62 μ M for PI3K γ . IC₅₀ & Target: IC₅₀: 2.62 μ M (PI3K γ), Autophagy^[1]. **In Vitro**: IITZ-01 (0-2 μ M, 24 h) enhances autophagosomes formation as indicated by increased expression of LC3-II levels time- and dose-dependently in triple-negative breast cancer (TNBC) cell lines (MDA-MB-231 and MDA-MB-453). IITZ-01 also demonstrates potent autophagy inhibitory activity in other breast, lung, and colon cancer cells^[1]. **In Vivo**: IITZ-01 (45 mg/kg, i.p. every alternate day for 4 weeks) inhibits average breast tumor growth when compared with control from third day of treatment in triple-negative breast tumor models in mice^[1].

References:

[1]. Guntuku L, et al. IITZ-01, a novel potent lysosomotropic autophagy inhibitor, has single-agent antitumor efficacy in triple-negative breast cancer in vitro and in vivo. *Oncogene*. 2018 Aug 30.

CAIndexNames:

1,3,5-Triazine-2,4-diamine, N2-[4-(1H-benzimidazol-2-yl)phenyl]-N4-(4-fluorophenyl)-6-(4-morpholinyl)-

SMILES:

FC1=CC=C(NC2=NC(N3CCOCC3)=NC(NC4=CC=C(C5=NC6=CC=CC=C6N5)C=C4)=N2)C=C1

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

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