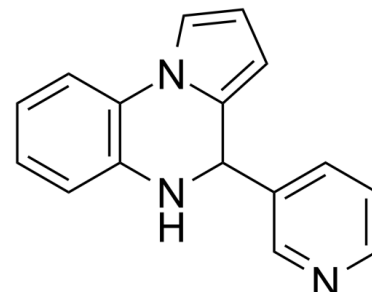


Data Sheet

Product Name:	UBCS039
Cat. No.:	CS-0086992
CAS No.:	358721-70-7
Molecular Formula:	C ₁₆ H ₁₃ N ₃
Molecular Weight:	247.29
Target:	Autophagy; Sirtuin
Pathway:	Autophagy; Cell Cycle/DNA Damage; Epigenetics
Solubility:	DMSO : 125 mg/mL (505.48 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

UBCS039 is the first synthetic, specific **Sirtuin 6 (SIRT6)** activator, inducing autophagy in human tumor cells, with an **EC₅₀** of 38 μ M^[1]. **IC₅₀ & Target:** EC₅₀: 38 μ M (SIRT6)^[1]. **In Vitro:** UBCS039 (75 μ M, 48 or 72 hours) induces deacetylation of SIRT6-targeted histone H3 sites in human cancer cells^[2].

UBCS039 leads to autophagosome accumulation in human cancer cells^[2].

UBCS039 induces autophagy via AMP-activated protein kinase (AMPK) signaling pathway activation^[2].

References:

[1]. Weijie You, et al. Structural Basis of Sirtuin 6 Activation by Synthetic Small Molecules. *Angew. Chem. Int. Ed.* 2017, 56, 1007-1011.

[2]. Sara Iachettini, et al. Pharmacological activation of SIRT6 triggers lethal autophagy in human cancer cells. *Cell Death and Disease* (2018) 9:996.

CAIndexNames:

Pyrolo[1,2-a]quinoxaline, 4,5-dihydro-4-(3-pyridinyl)-

SMILES:

N12C(C(C3=CC=CN=C3)NC4=C2C=CC=C4)=CC=C1

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

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