

Bioactive Molecules, Building Blocks, Intermediates

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Product Name:	S55746	
Cat. No.:	CS-0065115	Ó
CAS No.:	1448584-12-0	
Molecular Formula:	C43H42N4O6	
Molecular Weight:	710.82	
Target:	Bcl-2 Family	
Pathway:	Apoptosis	
Solubility:	H2O : < 0.1 mg/mL (insoluble); DMSO : 50 mg/mL (70.34 mM; Need ultrasonic)	

Data Sheet



BIOLOGICAL ACTIVITY:

S55746 (BLC201) is a potent, orally active and selective BCL-2 inhibitor, with a K_i of 1.3 nM and a K_d of 3.9 nM. S55746 (BLC201) has antitumor activity with low toxicity^[1]. IC50 & Target: Ki: 1.3 nM (BCL-2)^[1]. In Vitro: S55746 (0-1 μ M) potently and selectively induces cell death^[1].

S55746 selectively induces apoptosis through BCL-2 inhibition in a BAX/BAK-dependent manner^[1]. **In Vivo**: S55746 is a highly efficacious and well-tolerated (even at doses up to 300 mg/kg) orally active BCL-2 inhibitor ^[1].

S55746 (20-100 mg/kg, p.o.) inhibits xenograft growth in RS4;11 and Toledo models time- and dose-dependently^[1].

PROTOCOL (Extracted from published papers and Only for reference)

Cell Assay: ^[1]Cells are seeded into 96-well plates and treated at 8 points with **1:2 serial dilution of S55746**. Cell viability is assessed and assayed for viability using CellTiter-Glo reagent. Plates are read using luminescence plate reader. Results are normalized to the viability of cells without **S55746** (control wells). The IC₅₀ values are calculated using nonlinear regression algorithms in XCell software ^[1].

Animal Administration: ^[1]Mice^[1]

Experiments are performed in SCID/beige female mice. RS4;11 Acute Lymphoblastic Leukemia cell lines and human cell lines are used. For each experiment, female SCID/beige mice are implanted subcutaneously with 3×10^6 Toledo or RS4;11. Body weights are recorded and tumors are measured with digital calipers twice to three times a week. When tumors reached approximately 200 mm³ for efficacy studies or 300 mm³ for pharmacodynamics studies, mice are randomized. S55746 is formulated in PEG300/EtOH/water (40/10/50). Mice are treated via oral gavage at 10 mL/kg with different doses (e.g., S55746: 20, 50, 100 mg/kg)^[1].

References:

[1]. Casara P, et al. S55746 is a novel orally active BCL-2 selective and potent inhibitor that impairs hematological tumor growth. Oncotarget. 2018 Apr 13;9(28):20075-20088.

CAIndexNames:

1-Indolizinecarboxamide, 3-[6-[[(3S)-3,4-dihydro-3-(4-morpholinylmethyl)-2(1H)-isoquinolinyl]carbonyl]-1,3-benzodioxol-5-yl]-5,6,7,8-tetrahydro-N-(4-hydroxyphenyl)-N-phenyl-

SMILES:

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

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