Product Datasheet

S-63845

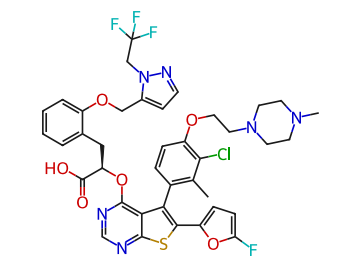
Catalog No. **BP-02338** · CAS **1799633-27-4** · Form **free base** · Physical state **solid** · Color **White to yellow** · Version **1.0** · Revision **2026-09-10**

FOR RESEARCH USE ONLY. NOT FOR HUMAN OR VETERINARY USE.

Target	Research area
Bcl-2 Family	**Cancer**

Molecular formula	$C_{39}H_{37}ClF_4N_6O_6S$
Molecular weight	**829.2590**

STRUCTURE



DESCRIPTION

S63845 is a potent and selective myeloid cell leukemia 1 (MCL1) inhibitor with a Kd of 0.19 nM for human MCL1.

BIOLOGICAL ACTIVITY

In vitro: The pro-survival protein myeloid cell leukemia 1 (MCL1) is over expressed in many cancers. S63845 is a small molecule that specifically binds with high affinity to the BH3-binding groove of MCL1. S63845 potently kills MCL1-dependent cancer cells, including multiple myeloma, leukaemia and lymphoma cells, by activating the BAX/BAK-dependent mitochondrial apoptotic pathway. The activity of S63845 is next evaluated in a panel of eight AML cell lines: all lines are sensitive to S63845 (IC50=4-233 nM). In vivo: S63845 shows potent anti-tumour activity with an acceptable safety margin as a single agent in several cancers. Intravenously injected (i.v.) S63845 exerts dose-dependent anti-tumour activity in human multiple myeloma (H929 and AMO1) xenografts in immunocompromised mice, with maximal tumour growth inhibition of 114% in the AMO1 model and 103% in the H929 model. At 25 mg/kg, S63845 induces complete regression in 7 out of 8 of the mice at 100 days after treatment in the AMO1 model.

SOLUBILITY

Soluble in DMSO

In vitro	DMSO : 100 mg/mL

REFERENCES

[1]. Kotschy A, et al. The MCL1 inhibitor S63845 is tolerable and effective in diverse cancer models. Nature. 2016 Oct 27;538(7626):477-482.

Lot CoA and SDS are separate documents.