

Product Name : Cereblon modulator 1

Synonyms : —

Cat No. : M22617

CAS Number : 1860875-51-9

Molecular Formula : C₂₂H₁₈ClF₂N₃O₄

Formula Weight : 461.85

Chemical Name : —

Description : Cereblon modulator 1 is a cereblon (CRBN) E3 ligase modulator. It specifically binds to CRBN, thereby affecting the activity of the ubiquitin E3 ligase complex. Cereblon modulator 1 (compound F) that demonstrates anti-proliferative activity in non-AML hematological cancer cell lines does not inhibit cell growth in any of the 11 AML cell lines tested, including the ten cell lines that are sensitive to the growth inhibitory activity of Compound D. However, when excess Cereblon modulator 1 is added to KG-1 AML cell cultures in the presence of Compound D, the anti-proliferative activity of Compound D is reduced, presumably due to competition for binding of Compound D to CRBN. The relative impact of Cereblon modulator 1 on the anti-proliferative effect of Compound D progressively increased with increasing concentrations of Cereblon modulator 1. In the presence of 100 μM Cereblon modulator 1, the potency of Compound D in inhibiting cell growth reduced by approximately 60-fold, and the potency of Compound D in inducing apoptosis reduced by approximately 40-fold.

Pathway : PROTACs

Target : E3 Ligase Ligand

Receptor : cereblon (CRBN) E3 ligase

Solubility : DMSO:240 mg/mL (519.65 mM; Need ultrasonic)

SMILES : FC(F)(C(=O)NCc1ccc2C(=O)N(Cc2c1)C1CCC(=O)NC1=O)c1ccc(Cl)cc1

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1. Ellen Filvaroff, et al. Methods for treating cancer and the use of biomarkers as a predictor of clinical sensitivity to therapies. WO2017120446A1.