

Data Sheet

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Product Name : CDK9 PROTAC 45

 Cat. No.
 : PC-21920

 CAS No.
 : 2411021-01-5

 Molecular Formula
 : C₄₃H₅₆N₁₀O₅

 Molecular Weight
 : 792.99

 Target
 : PROTAC

Solubility : 10 mM in DMSO

Biological Activity

CDK9 PROTAC 45 is a highly potent, efficacious CDK9 PROTAC degrader, induces cell apoptosis in vitro and inhibits tumor growth in the MDA-MB-231 TNBC model.

CDK9 PROTAC 45 inhibits the growth of MDA-MB-468, MDA-MB-231, and BT-549 cells with IC50 values of 15.0, 13.6, and 3.9 nM, respectively.

CDK9 PROTAC 45 does not induce the degradation of other CDK proteins, including CDK1, CDK2, CDK4, CDK5, CDK6, and CDK7 within the concentration ranging from 100 to 500 nM in MDA-MB-231 cells.

CDK9 PROTAC 45 does not induce the degradation of GSPT1, which could induce degradation by certain CRBN-dependent PROTACs and molecule glues.

CDK9 PROTAC 45 demonstrates to specifically induce protein degradation of CDK9, rather than CDK7, resulting in the downregulation of MYC and a decrease of tumor cell proliferation in vivo.

CDK9 PROTAC 45 (2.5 or 5.0 mg/kg, i.p.) inhibits tumor growth in MDA-MB-231 CDX mice.

References

Wei D, et al. J Med Chem. 2021 Oct 14;64(19):14822-14847.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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