

Product Datasheet

CR-1-31-B

Catalog No. **BP-00752** · CAS **1352914-52-3** · Form **free base** · Physical state **solid** · Color **White to off-white** · Version **1.0** · Revision **2026-09-04**

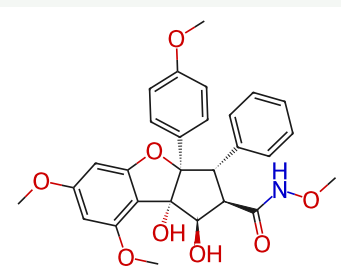
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Target Eukaryotic Initiation Factor (eIF); Apoptosis	Research area Cancer
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Molecular formula **C₂₈H₂₉NO₈**

Molecular weight **507.5318**

STRUCTURE



DESCRIPTION

CR-1-31-B is a synthetic rocaglate and a potent eIF4A inhibitor. CR-1-31-B exhibits powerful inhibitory effects over eIF4A by perturbing the interaction between eIF4A and RNA, sequentially impeding initiation during protein synthesis. CR-1-31-B perturbs association of Plasmodium falciparum eIF4A (PfeIF4A) with RNA. CR-1-31-B induces apoptosis of neuroblastoma and gallbladder cancer cells.

BIOLOGICAL ACTIVITY

Gilmelisib is an antineoplastic. Gilmelisib is a PI3K inhibitor (IC₅₀ <1 nM for PI3K p110α).

SOLUBILITY

Soluble in DMSO

In vitro DMSO : 230 mg/mL

REFERENCES

- [1]. Jin C, Rajabi H, Rodrigo CM, Porco JA Jr, Kufe D. Targeting the eIF4A RNA helicase blocks translation of the MUC1-C oncoprotein. *Oncogene*. 2013;32(17):2179-2188.
- [2]. Cao Y, et al. Targeting eIF4A using rocaglate CR 1 31B sensitizes gallbladder cancer cells to TRAIL mediated apoptosis through the translational downregulation of c FLIP. *Oncol Rep*. 2021;45(1):230-238.
- [3]. Langlais D, et al. Rocaglates as dual-targeting agents for experimental cerebral malaria. *Proc Natl Acad Sci U S A*. 2018;115(10):E2366-E2375.
- [4]. Skofler C, et al. Eukaryotic Translation Initiation Factor 4A1: A Potential Novel Target in Neuroblastoma. *Cells*. 2021;10(2):301. Published 2021 Feb 2.

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Lot CoA and SDS are separate documents.