

Data Sheet

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 Product Name
 : D089

 Cat. No.
 : PC-47053

 CAS No.
 : 880440-91-5

 Molecular Formula
 : C24H28N2O3

 Molecular Weight
 : 392.499

 Target
 : c-Myc

Solubility : 10 mM in DMSO



Biological Activity

D089 is a selective small molecule stabilizer of the **MYC G4-quadruplex**, not only inhibits MYC expression in myeloma cell lines, but also selectively induces G1 arrest in MYC-driven cancer cell lines containing the MYC-G4 sequence. D089 reduces MYC transcription and induces cytotoxicity in myeloma cells (L363 MM cells, IC50=13 uM). D089 induces the canonical pathways involved in the unfolded protein response, endoplasmic reticulum stress, and inflammatory responses to modulate cell cycle progression, senescence and caspase 1-mediated cell death by pyroptosis. D089 kills cells independent of effector caspase 3 (CASP3), induces caspase-1 and 8 dependent cell death mechanism (pyroptosis).

References

Snehal M Gaikwad, et al. *Cancers (Basel)*. 2020 Oct 13;12(10):2952.

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

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