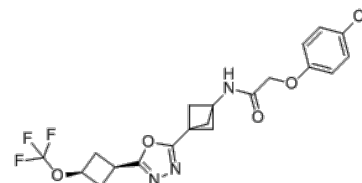


Product Name : DNL343
Cat. No. : PC-22002
CAS No. : 2278265-85-1
Molecular Formula : C₂₀H₁₉ClF₃N₃O₄
Molecular Weight : 457.83
Target : Eukaryotic Initiation Factor (eIF)
Solubility : 10 mM in DMSO



CAS: 2278265-85-1

Biological Activity

DNL343 is a potent, selective, and brain-penetrant **eIF2B** activator with IC₅₀ of 3.2 nM in cellular ATF4 nano-Luciferase (nLuc) reporter assays.

DNL343 is highly CNS-penetrant in a rat PK study with a brain-to-plasma unbound ratio (Bu/Pu) of 0.8.

Displays no activation of PXR, CAR, or AHR, as well as no significant effect against CEREP or kinase selectivity panels.

Inhibits the formation of TDP43(86–414)-positive stress granules in a dose-dependent manner in H4 cells with IC₅₀ of 13 nM.

DNL343 inhibits ISR activation in the brain of the Eif2b5 R191H knock-in mouse model, reduces ISR markers, shows potential therapeutic for the treatment of ALS.

References

Craig RA 2nd, et al. *J Med Chem*. 2024 Mar 21. doi: 10.1021/acs.jmedchem.3c02422.

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

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