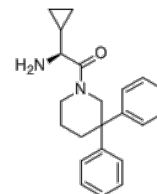


Product Name : AD-8007
Cat. No. : PC-21664
CAS No. : 1497439-74-3
Molecular Formula : C₂₂H₂₆N₂O
Molecular Weight : 334.46
Target : Other Targets
Solubility : 10 mM in DMSO



CAS: 1497439-74-3

Biological Activity

AD-8007 is a potent, brain permeable human Acetyl-CoA synthetase 2 (**ACSS2**) inhibitor with IC₅₀ of 0.89 μ M, a key metabolic enzyme involved in regulating fatty acid synthesis and protein acetylation in tumor cells.

AD-8007 specifically binds ACSS2 (K_D=126 μ M) but not the mitochondrial isoform hACSS1.

AD-8007 leads to a significant reduction in lipid storage, reduction in colony formation, and increase in cell death in MDA-MB-231BR cells.

AD-8007 significantly reduces tumor size and synergizes with radiation in blocking BCBM tumor growth in an ex vivo orthotopic brain-slice tumor model.

References

- Emily Esquea, et al. *bioRxiv*. December 23, 2023.
- Esquea EM, et al. *Front Pharmacol*. 2024 May 16;15:1394685.

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

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