

Data Sheet

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Product Name : CuATSM
Cat. No. : PC-24567
CAS No. : 68341-09-3
Molecular Formula : C₈H₁₄CuN₆S₂
Molecular Weight : 321.91

Target : Ferroptosis
Solubility : 10 mM in DMSO



Biological Activity

CuATSM is orally available brain-penetrant copper compound that scavenges free radicals, inhibits lipid peroxidation and ferroptosis, stabilises various ALS-associated variants of the SOD1 protein, reducing misfolding and toxicity. CuATSM potently inhibits ferroptosis, prevented SMC phenotypic switch, neointimal formation and arterial inflammation in mice.

CuATSM protects against a broad variety of SOD1 mutations in cell culture model of SOD1-fALS CuATSM improves motor function and extends survival but is not tolerated at a high dose in SOD1G93A mice with a C57BL/6 background

CuATSM has repeatedly shown in mouse models to be a promising therapeutic treatment for SOD1-associated ALS and is currently in Phase II/III clinical trials for the treatment of ALS.

References

Lum JS, et al. EBioMedicine. 2025 Apr 12;115:105692.

Farrawell NE, et al. ACS Chem Neurosci. 2019 Mar 20;10(3):1555-1564.

Ji QX, et al. Cell Death Differ. 2023 Feb;30(2):457-474.

Lum JS, et al. Sci Rep. 2021 Sep 29;11(1):19392.

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

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