LKT Laboratories, Inc.

FIN56

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Product Information

Product ID F337521
CAS No. 1083162-61-1
Chemical Name

Synonym

Formula $C_{25}H_{31}N_3O_5S_2$
Formula Wt. 517.7
Melting Point
Purity ≥98%
Solubility

Pricing and Availability

Bulk quanitites available upon request

Product ID	Size	List Price
F337521	5 mg	$125.00
F337521	25 mg	$295.00

Store Temp -20°C
Ship Temp Ambient
Description FIN56 is a type 2 ferroptosis-inducing compound that operates through a mechanism distinct from erastin and RSL3. FIN56 promotes the degradation of GPX4 protein and independently activates squalene synthase (SQS), diverting mevalonate pathway flux away from coenzyme Q10 (CoQ10) biosynthesis. The resulting depletion of CoQ10, a key lipophilic antioxidant, sensitizes cells to lipid peroxidation and ferroptotic death. FIN56 is a valuable tool for dissecting GPX4-dependent and CoQ10-dependent ferroptosis mechanisms.

References

1. Shimada K, Skouta R, Kaplan A, et al. Global survey of cell death mechanisms reveals metabolic regulation of ferroptosis. Nat Chem Biol. 2016;12(7):497-503. PMID: 27159577.

2. Dixon SJ, Lemberg KM, Lamprecht MR, et al. Ferroptosis: an iron-dependent form of nonapoptotic cell death. Cell. 2012;149 (5):1060-72. PMID: 22632970.

3. Stockwell BR, Friedmann Angeli JP, Bayir H, et al. Ferroptosis: A Regulated Cell Death Nexus Linking Metabolism, Redox Biology, and Disease. Cell. 2017;171(2):273-285. PMID: 28753430.

4. Yang WS, SriRamaratnam R, Welsch ME, et al. Regulation of ferroptotic cancer cell death by GPX4. Cell. 2014;156(1-2):317 -31. PMID: 24439385.

5. Bersuker K, Hendricks JM, Li Z, et al. The CoQ oxidoreductase FSP1 acts parallel to GPX4 to inhibit ferroptosis. Nature. 2019;575(7784):688-692. PMID: 31634900.