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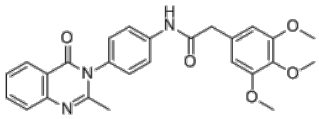
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	icFSP1
Cat. No.	:	PC-20966
CAS No.	:	1115910-36-5
Molecular Formula	:	$C_{26}H_{25}N_3O_5$
Molecular Weight	:	459.50
Target	:	Ferroptosis
Solubility	:	10 mM in DMSO



CAS: 1115910-36-5

Biological Activity

icFSP1 is a potent, selective human **ferroptosis suppressor protein-1** (hFSP1) inhibitor, promotes ferroptosis and indirectly inhibits FSP1 by inducing condensate formation.
Unlike iFSP1 (Cat. PC-38437), the first described on-target FSP1 inhibitor, icFSP1 does not competitively inhibit FSP1 enzyme activity, but instead triggers subcellular relocalization of FSP1 from the membrane and FSP1 condensation before ferroptosis induction, in synergism with GPX4 inhibition.
icFSP1 icFSP1 induces ferroptosis in synergy with GPX4 inhibition, reduces cell viability only in cells overexpressing hFSP1.
icFSP1 specifically inhibits the human isoform, but not mouse FSP1 (mFSP1).
icFSP1 indirectly inhibits FSP1 by inducing condensate formation.
icFSP1 (50 mg /kg, i.p. twice a day) significantly inhibited tumour growth and decreased tumour weight, induced FSP1 condensates in xenograft tumour model, without affecting body weight.

References

Toshitaka Nakamura, et al. ***Nature.*** 2023 Jun 28. doi: 10.1038/s41586-023-06255-6.

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