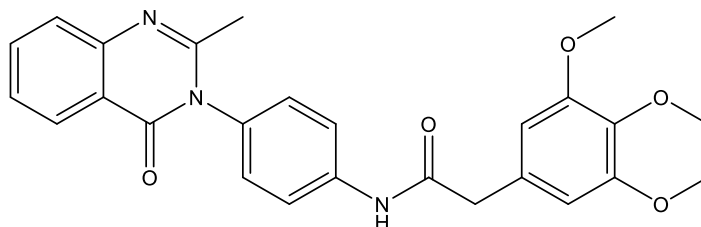


Catalog # 10-5735

icFSP1

CAS# 1115910-36-5

3,4,5-Trimethoxy-N-[4-(2-methyl-4-oxo-3(4H-quinazoliny)phenyl)]benzeneacetamide
Lot # S107101



Ferroptosis suppressor protein-1 (FSP1) along with ubiquinone and NAD(P)H/H⁺ has been identified as a second ferroptosis suppressing system which prevents lipid peroxidation independently of the cysteine-glutathione-glutathione peroxidase 4 (GPX4) axis.¹⁻³ icFSP1 was discovered in a screen to identify inhibitors of FSP1. However, it does not competitively inhibit FSP1 enzyme activity but triggers subcellular relocalization of FSP1 (at 2.5 μ M) from the membrane and FSP1 condensation before ferroptosis induction. icFSP1-induced FSP1 condensates show droplet-like properties consistent with phase separation. icFSP1 impairs tumor growth and induces FSP1 condensates in tumors *in vivo*.⁴

- 1) Bersuker *et al.* (2019), *The CoQ oxidoreductase FSP1 acts parallel to GPX4 to inhibit ferroptosis*; Nature, **575** 688
- 2) Doll *et al.* (2019), *FSP1 is a glutathione-independent ferroptosis suppressor*; Nature, **575** 693
- 3) Mishima *et al.* (2022), *A non-canonical vitamin K cycle is a potent ferroptosis suppressor*; Nature, **608** 778
- 4) Nakamura *et al.* (2023), *Phase separation of FSP1 promotes ferroptosis*; Nature, **619** 371

PHYSICAL DATA

Molecular Weight:	459.50
Molecular Formula:	C ₂₆ H ₂₅ N ₃ O ₅
Purity:	>96% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (40 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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