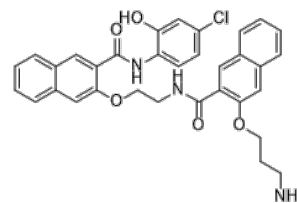


Product Name : Dual SLC25A51 and SDHA inhibitor 615
Cat. No. : PC-26023
CAS No. : 1433286-57-7
Molecular Formula : C₃₃H₃₀ClN₃O₅
Molecular Weight : 584.07
Target : Ras
Solubility : 10 mM in DMSO



CAS: 1433286-57-7

Biological Activity

Dual SLC25A51 and SDHA inhibitor 615 is a specific small molecule dual inhibitor of SLC25A51 and succinate dehydrogenase (SDH) subunit SDHA, selectively kills KRAS-mutated cells.

615 is a highly selective agent that effectively kills iKRAS cells under both unstressed and Gal-stressed conditions.

615 demonstrates the broad efficacy and selectivity of 615 across KRAS-mutated cell types, including NOMO-1 cells, NH-KRAS cells, KRAS-mutated AML patient samples, and KRAS-mutated solid tumor cells.

615 exerts its cytotoxic effects through mechanisms distinct from direct KRAS inhibition.

615 significantly reduced the in vivo engraftment of iKRAS cells, NOMO-1 cells, NH-KRAS cells.

615 (12.5 mg/kg intraperitoneally) prolonged the survival of KRAS-mutated leukemic mice.

615 binds to SDHA and impairs its enzymatic function, reduces OXPHOS via binding to SDHA, contributing to its selective toxicity toward KRAS-mutated cells.

615 selectively depletes mito NAD⁺ in KRAS-mutated cells via inhibiting SLC25A51.

615 directly binds to SLC25A51 (MST KD=0.344 uM) to inhibit mito NAD⁺ import.

References

Jia A, et al. Cell Metab. 2026 Jan 29:S1550-4131(26)00001-X.

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

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