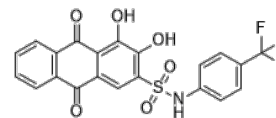


Product Name : PGMI-004A
Cat. No. : PC-23304
CAS No. : 1313738-90-7
Molecular Formula : C₂₁H₁₂F₃NO₆S
Molecular Weight : 463.38
Target : Other Targets
Solubility : 10 mM in DMSO



CAS: 1313738-90-7

Biological Activity

PGMI-004A is a specific small molecule inhibitor of glycolytic enzyme phosphoglycerate mutase 1 (**PGAM1**) with IC₅₀ of 13.1 uM, K_i of 3.91 uM.

PGMI-004A directly binds to the protein with K_D of 9.4 uM.

PGMI-004A treatment results in decreased 2-PG and increased 3-PG levels in H1299 cells, which could be rescued by treatment with methyl-2-PG.

PGMI-004A treatment results in decreased oxidative PPP flux and NADPH/NADP⁺ ratio as well as reduced biosynthesis of lipids and RNA and cell proliferation in H1299 cells.

PGMI-004A treatment inhibits cancer cell proliferation and tumor growth, and alters 3-PG and 2-PG levels in primary leukemia cells from human patients, leading to attenuated leukemia cell proliferation.

References

Hitosugi T, et al. *Cancer Cell*. 2012 Nov 13;22(5):585-600.

Wang P, et al. *Bioorg Med Chem*. 2018 May 1;26(8):1961-1970.

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

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