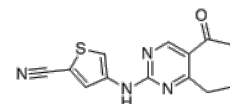


Product Name : G6PDi-1
Cat. No. : PC-72918
CAS No. : 2457232-14-1
Molecular Formula : C₁₄H₁₂N₄OS
Molecular Weight : 284.377
Target : Other Targets
Solubility : 10 mM in DMSO



Biological Activity

G6PDi-1 is a non-steroidal, potent cell active small molecule inhibitor of **glucose-6-phosphate dehydrogenase (G6PD)** with IC₅₀ of 70 nM (hG6PD).

G6PDi-1 binds to G6PD reversibly and non-competitively, binds to G6PD at an allosteric site and inhibits enzyme catalytic activity.

G6PDi-1 dose-dependently decreases 6-PG levels in HepG2 cells with IC₅₀ of 13 uM, decreases 2H transfer from [1-2H]-glucose to NADPH's active hydride in treated HCT116 cells (IC₅₀=31 uM).

G6PDi-1 dose-dependently increases NADP⁺/NADPH ratio in T cells, suppresses T cell cytokine production while having a minimal effect on initial activation or proliferation, suppresses oxidative burst in bone marrow derived macrophages.

References

Gherguson JM, et al. *Nat Chem Biol.* 2020 Jul;16(7):731-739.

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

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