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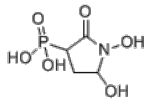
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	SF2312
Cat. No.	:	PC-20387
CAS No.	:	107729-45-3
Molecular Formula	:	$C_4H_8NO_6P$
Molecular Weight	:	197.08
Target	:	Enolase
Solubility	:	10 mM in DMSO



Biological Activity

SF2312 (SF 2312) is a highly potent inhibitor of **Enolase** with IC50 of 37.9 and 42.5 nM for recombinant hENO1 and hENO2, respectively.
SF2312 previously isolated as natural phosphonate antibiotic of unknown mode of action.
SF2312 exhibits non-competitive kinetics with respect to substrate 2-PGA but competitive kinetics at higher concentrations of inhibitor.
SF2312 is selectively toxic to ENO1-deleted glioma cells in the low μM range.
SF2312 (10 uM) selectively blocks glycolysis in ENO1-deleted glioma cells.
SF2312 proved superior to PhAH for killing ENO1-deleted versus ENO1-rescued glioma cells, especially under anaerobic conditions.

References

Leonard PG, et al. ***Nat Chem Biol***. 2016 Dec;12(12):1053-1058.

Watanabe H, et al. Science Reports of Meiji Seika Kaisha. 1986;(No. 25):12–17.

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