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Data Sheet

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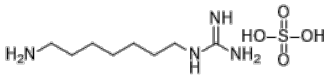
Product Name	:	DHPS inhibitor GC7
Cat. No.	:	PC-27197
CAS No.	:	150417-90-6
Molecular Formula	:	$C_8H_{22}N_4O_4S$
Molecular Weight	:	270.35
Target	:	Other Targets
Solubility	:	10 mM in DMSO



Biological Activity

GC7 (N1-guanyl-1,7-diaminoheptane) is a high affinity, effective deoxyhypusine synthase (DHPS) inhibitor with Ki of 10 nM, inhibits spermidine-dependent hypusine-eIF5A activation.
GC7 inhibits NB cell proliferation in a dose-dependent manner, through induction of the cell cycle inhibitor p21 and reduction of total and phosphorylated Rb proteins.
GC7/DFMO (ODC inhibitor) combination approach specifically inhibits both spermidine biosynthesis and post-translational, spermidine-dependent hypusine-eIF5A activation, induces apoptotic cell death in neuroblastoma.

References

Bandino A, et al. Cell Oncol (Dordr). 2014 Dec;37(6):387-98.

Tang DJ, et al. Hepatology. 2010 Apr;51(4):1255-63.

Schultz CR, et al. Biochem J. 2018 Jan 31;475(2):531-545.

J Jakus, et al. J Biol Chem. 1993 Jun 25;268(18):13151-9.

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

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