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Data Sheet

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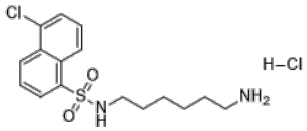
Product Name	:	Calmodulin inhibitor W-7
Cat. No.	:	PC-23469
CAS No.	:	61714-27-0
Molecular Formula	:	$C_{16}H_{22}Cl_2N_2O_2S$
Molecular Weight	:	377.32
Target	:	Myosin
Solubility	:	10 mM in DMSO



Biological Activity

W-7 hydrochloride is a selective calmodulin antagonist, inhibits the Ca2+-calmodulin-dependent phosphodiesterase and myosin light chain kinase (MLCK) with IC50 of 28 μM and 51 μM, respectively.
W-7 selectively blocks the phase of the cell cycle (G1/S boundary phase) in a manner. 25 μM W-7 arrests the growth of the cells at the G1/S boundary phase of the cell cycle.
Treatment with W-7 results in the dose-dependent inhibition of cell proliferation in various human multiple myeloma cell lines.
W-7 induces G1 phase cell cycle arrest by downregulating cyclins and upregulating p21cip1. W-7 induces apoptosis via caspase activation.

References

H Hidaka, et al. Proc Natl Acad Sci U S A. 1981 Jul;78(7):4354-7.

M Asano. J Pharmacol Exp Ther. 1989 Nov;251(2):764-73.

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

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