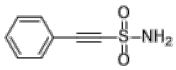
ProbeChem®
Expedite Your Scientific Research

Data Sheet

WWW.PROBECHEM.COM

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	Pifithrin-μ
Cat. No.	:	PC-24085
CAS No.	:	64984-31-2
Molecular Formula	:	$C_8H_7NO_2S$
Molecular Weight	:	181.21
Target	:	MDM2-p53
Solubility	:	10 mM in DMSO



Biological Activity

Pifithrin-μ is a specific small molecule inhibitor of p53 and HSP70, shows antitumor and neuroprotective activity.
inhibits p53 binding to mitochondria by reducing its affinity to antiapoptotic proteins Bcl-xL and Bcl-2 but has no effect on p53-dependent transactivation, activity of caspases 2, 8, 9 and 10 in a cell-free system, or NF-κB-dependent transcription.
reduces viability in A549 cells, with IC50s of 44.9 and 25.7 μM at 24 h and 48 h.
Pifithrin-μ (20 μM) suppresses the cell migration, induces cell cycle arrest and cell apoptosis in A549 and H460 cells.
Pifithrin-μ (10 uM, 20 μM) inhibits activities of AKT, ERK, and Hsp70 in A549 and H460 cells.
Pifithrin-μ (20 μM) sensitizes A549 and H460 cell lines to TRAIL-induced cell proliferation inhibition and apoptosis.

References

Strom E, et al. Nat Chem Biol. 2006 Sep;2(9):474-9. Epub 2006 Jul 23.

Zhou Y, et al. Oncol Rep. 2017 Jan;37(1):313-322.

E-mail: tech@probechem.com