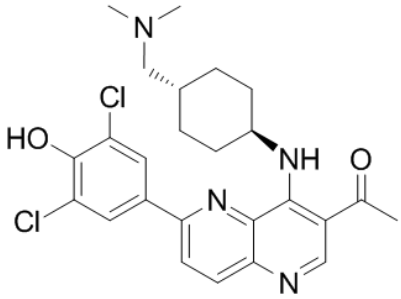
ProbeChem®
Expedite Your Scientific Research

WWW.PROBECHEM.COM

Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	OTS-167
Cat. No.	:	PC-44480
CAS No.	:	1431697-89-0
Molecular Formula	:	$C_{25}H_{28}Cl_2N_4O_2$
Molecular Weight	:	487.4214
Target	:	MELK
Solubility	:	10 mM in DMSO



Biological Activity

OTSSP167 (OTS167) is a highly potent, selective and orally active **MELK** (maternal embryonic leucine zipper kinase) inhibitor with IC50 of 0.41 nM.
OTSSP167 demonsrates in vitro anti-proliferative against MELK-highly expressed A549 (lung), T47D (breast), DU4475 (breast), and 22Rv1 (prostate) cancer cells with IC50 of 6.7, 4.3, 2.3, and 6.0 nM, respectively, with significant lower activity against HT1197 (bladder, low-MELK expression) cancer cells (IC50=97 nM).
OTSSP167 shows the effectiveness on the growth of various human cancer xenograft.
OTSSP167 inhibits the phosphorylation of novel MELK substrates, significantly suppresses the phosphorylation levels of DBNL and PSMA1 in breast cancer cell lines.

References

Chung S, et al. ***Oncotarget.*** 2012 Dec;3(12):1629-40.

Alachkar H, et al. ***Oncotarget.*** 2014 Dec 15;5(23):12371-82.

Stefka AT, et al. ***Blood Cancer J.*** 2016 Aug 19;6(8):e460.

E-mail: tech@probechem.com