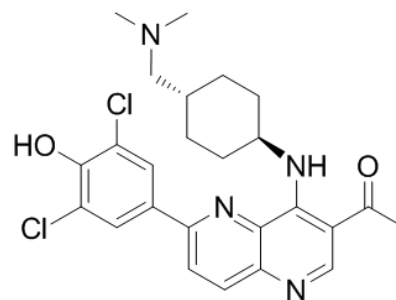


Product Name : OTS167
Cat. No. : PC-44480
CAS No. : 1431697-89-0
Molecular Formula : C₂₅H₂₈Cl₂N₄O₂
Molecular Weight : 487.4214
Target : MELK
Solubility : 10 mM in DMSO



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 demonstrates in vitro anti-proliferative activity 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.

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

E-mail: tech@probechem.com