

Data Sheet

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 Product Name
 :
 WZ4003

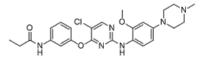
 Cat. No.
 :
 PC-21279

 CAS No.
 :
 1214265-58-3

 Molecular Formula
 :
 C₂₅H₂₉CIN₆O₃

Molecular Weight : 497.00 Target : AMPK

Solubility : 10 mM in DMSO



Biological Activity

WZ4003 is a potent, highly specific protein kinase inhibitor of **NUAK kinase** with IC50 of 20 nM and 100 nM for **NUAK1** and **NUAK2**, respectively.

WZ4003 displays extreme selectivity and does not significantly inhibit the activity of 139 other kinases including ten AMPK family members.

WZ4003 inhibits the phosphorylation of the only well-characterized substrate, MYPT1 (myosin phosphate-targeting subunit 1) that is phosphorylated by NUAK1 at Ser(445).

WZ4003 significantly inhibits migration in a wound-healing assay to a similar extent as NUAK1-knockout in MEFs (mouse embryonic fibroblasts), also inhibit proliferation of MEFs to the same extent as NUAK1 knockout and U2OS cells to the same extent as NUAK1 shRNA knockdown.

References

Banerjee S, et al. *Biochem J.* 2014 Jan 1;457(1):215-25.

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

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