

Data Sheet

WWW.PROBECHEM.COM

Global Supplier of Chemical Probes, Inhibitors & Agonists.

 Product Name
 :
 BCH001

 Cat. No.
 :
 PC-72257

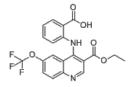
 CAS No.
 :
 384859-58-9

 Molecular Formula
 :
 C₂₀H₁₅F₃N₂O₅

 Molecular Weight
 :
 420.344

 Target
 :
 Telomerase

Solubility :



Biological Activity

BCH001 (BCH-001) a specific, small molecule PAPD5 inhibitor, inhibits rPAPD5 in the low micromolar range in vitro. BCH001 showed no inhibition of PARN or several other canonical and non-canonical polynucleotide polymerases. BCH001 exhibited ATP- and dose-dependent binding to rPAPD5.

BCH001 (0.1-1 uM) restores TERC and telomere length in dyskeratosis congenita (DC) patient iPSCs, reversibly normalizes telomere length and non-coding RNA biogenesis.

BCH001 upregulates TERC without immortalizing TERT-negative cells, restores TERC maturation in PARN-deficient primary human HSPCs and leukemia cell lines.

References

Nagpal N, et al. Cell Stem Cell. 2020 Jun 4;26(6):896-909.e8.

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

E-mail: tech@probechem.com