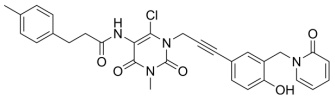
MLKL-IN-4

Cat. No.:	HY-151542
Molecular Formula:	$C_{30}H_{27}ClN_4O_5$
Molecular Weight:	559.01
Target:	Mixed Lineage Kinase; Necroptosis; RIP kinase
Pathway:	MAPK/ERK Pathway; Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	MLKL-IN-4 (compound 56) is a potent MLKL (Mixed lineage kinase domain-like protein) inhibitor. MLKL-IN-4 inhibits necroptosis in HT-29 cells and acts downstream of MLKL phosphorylation, with EC_{50} of 82 nM[1]. MLKL-IN-4 is a click chemistry reagent, it contains an Alkyne group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAc) with molecules containing Azide groups.
In Vitro	MLKL-IN-4 (compound 56) (10 μM) slightly inhibits RIPK1, does not affect the phosphorylation status of RIPK1 and MLKL[1]. MLKL-IN-4 (1 μM, 24 h) inhibits the translocation of MLKL to cell membranes in HT-29 cells[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	MLKL-IN-4 (compound 56) shows T1/2 over 48 h and more than 150-fold lower reaction rates with glutathione (GSH), which potentially decreased their off-target effects and cell toxicity[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Cui B, et al. Discovery of a New Class of Uracil Derivatives as Potential Mixed Lineage Kinase Domain-like Protein (MLKL) Inhibitors. J Med Chem. 2022 Oct 13;65(19):12747-12780.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA