## **Product** Data Sheet

## MLKL-IN-3

Cat. No.: HY-151541 Molecular Formula:  $C_{31}H_{29}ClN_4O_6$  Molecular Weight: 589.04

Target: Mixed Lineage Kinase; Necroptosis

Pathway: MAPK/ERK Pathway; Apoptosis

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	MLKL-IN-3 (compound 66) is a potent MLKL (Mixed lineage kinase domain-like protein) inhibitor. MLKL-IN-3 inhibits necroptosis in HT-29 cells and acts downstream of MLKL phosphorylation, with EC <sub>50</sub> of 31 nM <sup>[1]</sup> . MLKL-IN-3 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-3 (compound 66) (1 $\mu$ M, 24 h) inhibits the translocation of MLKL to cell membranes in HT-29 cells <sup>[1]</sup> . MLKL-IN-3 does not affect the phosphorylation status of RIPK1 and MLKL <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	MLKL-IN-3 (compound 66) 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 <sup>[1]</sup> .  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.

Caution: Product has not been fully validated for medical applications. For research use only.

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