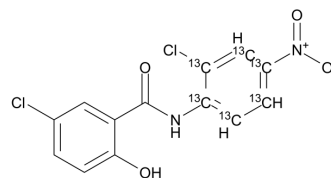


Niclosamide-¹³C₆

| | | | |
|---------------------------|--|-------|----------|
| Cat. No.: | HY-B0497S1 | | |
| CAS No.: | 1325808-64-7 | | |
| Molecular Formula: | C ₇ ¹³ C ₆ H ₈ Cl ₂ N ₂ O ₄ | | |
| Molecular Weight: | 333.08 | | |
| Target: | STAT; Parasite; Antibiotic; Isotope-Labeled Compounds | | |
| Pathway: | JAK/STAT Signaling; Stem Cell/Wnt; Anti-infection; Others | | |
| Storage: | Powder | -20°C | 3 years |
| | | 4°C | 2 years |
| | In solvent | -80°C | 6 months |
| | | -20°C | 1 month |



SOLVENT & SOLUBILITY

| | |
|-----------------|---|
| In Vitro | H ₂ O : 0.1 mg/mL (0.30 mM; ultrasonic and warming and heat to 60°C) |
|-----------------|---|

BIOLOGICAL ACTIVITY

Description Niclosamide-¹³C₆ is the ¹³C₆ labeled Niclosamide. Niclosamide (BAY2353) is an orally bioavailable chlorinated salicylanilide, with anthelmintic and potential antineoplastic activity. Niclosamide (BAY2353) inhibits STAT3 with IC₅₀ of 0.25 μM in HeLa cells and inhibits DNA replication in a cell-free assay.

In Vitro Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

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- [2]. Jin, Y., et al. Antineoplastic mechanisms of niclosamide in acute myelogenous leukemia stem cells: inactivation of the NF-kappaB pathway and generation of reactive oxygen species. *Cancer Res*, 2010. 70(6): p. 2516-27.
- [3]. Ren, X., et al., Identification of niclosamide as a new small-molecule inhibitor of the STAT3 signaling pathway. *ACS Medicinal Chemistry Letters*, 2010. 1(9): p. 454-459.
- [4]. Wu CJ, et al. Inhibition of severe acute respiratory syndrome coronavirus replication by niclosamide. *Antimicrob Agents Chemother*. 2004 Jul;48(7):2693-6.
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Caution: Product has not been fully validated for medical applications. For research use only.

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