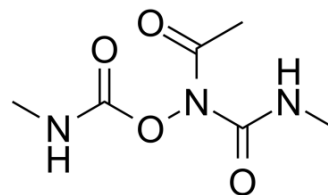


Caracemide

Cat. No.:	HY-119974
CAS No.:	81424-67-1
Molecular Formula:	C ₆ H ₁₁ N ₃ O ₄
Molecular Weight:	189.17
Target:	DNA/RNA Synthesis; Bacterial
Pathway:	Cell Cycle/DNA Damage; Anti-infection
Storage:	Store at room temperature * In solvent : -80°C, 6 months; -20°C, 1 month (Store at room temperature)



BIOLOGICAL ACTIVITY

Description	Caracemide (NSC-253272) inhibits the enzyme ribonucleotide reductase of Escherichia coli. Caracemide is a novel anticancer agent derived from a hydroxamic acid and has demonstrated to produce severe central nervous system (CNS) toxicity ^{[1][2]} .
In Vitro	Caracemide inactivates R1 by covalent modification at the substrate-binding site and has a toxic metabolite, methylisocyanate (MIC), in vivo ^{[1][2]} .
In Vivo	The mercapturic acid derivative AMCC was identified in urine rats following administration to rats of a single i.p. dose (6.6 mg/kg) of caracemide (NSC-253272) ^[1] .

REFERENCES

- [1]. Larsen IK, et al. Caracemide, a site-specific irreversible inhibitor of protein R1 of Escherichia coli ribonucleotide reductase. J Biol Chem. 1992 Jun 25;267(18):12627-31.
- [2]. Slatter JG, et al. Studies on the metabolic fate of caracemide, an experimental antitumor agent, in the rat. Evidence for the release of methyl isocyanate in vivo. Chem Res Toxicol. 1993 May-Jun;6(3):335-40.

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