Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Amonafide

Catalog No: tcsc0496

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
69408-81-7

Formula:
$C_{16}H_{17}N_3O_2$

Pathway:
Cell Cycle/DNA Damage

Target:
Topoisomerase

Purity / Grade:
>98%

Solubility:
H2O :

Alternative Names:
AS1413

Observed Molecular Weight:
283.33

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Product Description

Amonafide is a **topoisomerase II** inhibitor and DNA intercalator that induces apoptotic signaling by blocking the binding of Topo II to DNA.

IC50 & Target: Topoisomerase II[1]

In Vitro: Amonafide is a topoisomerase II inhibitor and DNA intercalator that induces apoptotic signaling by blocking the binding of Topo II to DNA[1]. Amonafide produces protein-associated DNA cleavage, single-strand breaks (SSB) and DPC and DNA double-strand cleavage. Amonafide (Nafidimide, 400 nM-2.4 μM) reduces the colony-forming ability of the leukemic cell lines in a dose-dependent manner[2]. Amonafide (0.05-0.4 μg/mL) reduces several tumor growth. However, Amonafide is active against only 12% of tumors compared with standard agents (5-fluorouracil, mitomycin C, cisplatin, and etoposide), which are active against more than 40% of tumors in the human bone marrow inhibitory range[3]. Amonafide inhibits the growth of HT-29, HeLa, and PC-3 cell lines, with IC_{50}s of 4.67, 2.73, and 6.38 μM[4].