

# 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:**

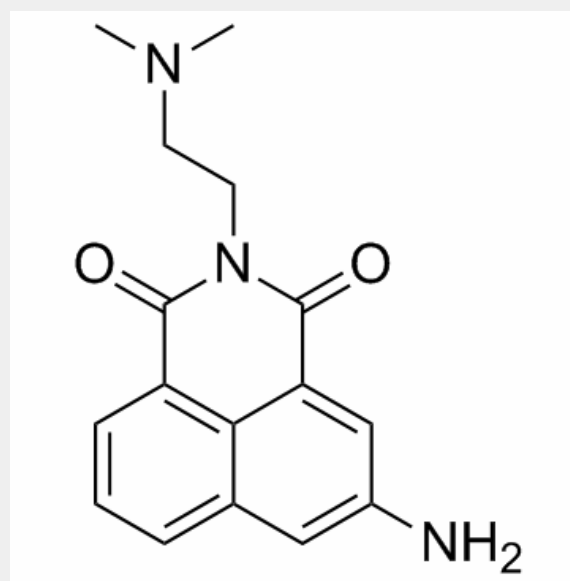
283.33

## 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<sup>[1]</sup>

**In Vitro:** Amonafide is a topoisomerase II inhibitor and DNA intercalator that induces apoptotic signaling by blocking the binding of Topo II to DNA<sup>[1]</sup>. Amonafide produces protein-associated DNA cleavage, single-strand breaks (SSB) and DPC and DNA double-strand cleavage. Amonafide (Nafidimide, 400 nM-2.4  $\mu$ M) reduces the colony-forming ability of the leukemic cell lines in a dose-dependent manner<sup>[2]</sup>. Amonafide (0.05-0.4  $\mu$ g/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<sup>[3]</sup>. Amonafide inhibits the growth of HT-29, HeLa, and PC-3 cell lines, with IC<sub>50</sub>s of 4.67, 2.73, and 6.38  $\mu$ M<sup>[4]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!