

## NU 7026

Catalog No: tcsc1532



### Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg



### Specifications

**CAS No:**

154447-35-5

**Formula:**

$C_{17}H_{15}NO_3$

**Pathway:**

PI3K/Akt/mTOR; Cell Cycle/DNA Damage

**Target:**

DNA-PK; DNA-PK

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 2.9 mg/mL (10.31 mM; Need ultrasonic)

**Alternative Names:**

DNA-PK Inhibitor II; LY293646

**Observed Molecular Weight:**

281.31

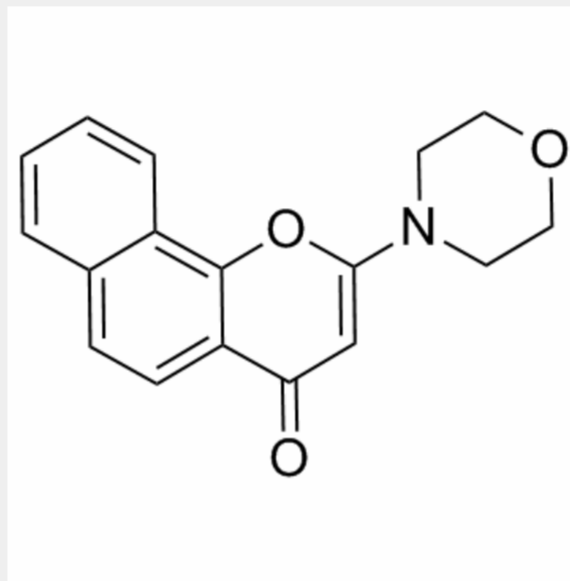
### Product Description

NU 7026 is a novel specific **DNA-PK** inhibitor with **IC<sub>50</sub>** of  $0.23 \pm 0.01 \mu\text{M}$ , also inhibits **PI3K** with **IC<sub>50</sub>** of  $13 \pm 3 \mu\text{M}$ .

IC50 & Target: IC50:  $0.23 \pm 0.01 \mu\text{M}$  (DNA-PK),  $13 \pm 3 \mu\text{M}$  (PI3K)<sup>[1]</sup>

**In Vitro:** NU7026 (10  $\mu\text{M}$ ) potentiates ionizing radiation (IR) cytotoxicity [potentiation factor at 90% cell kill ( $\text{PF}_{90}$ )= $1.51 \pm 0.04$ ] in exponentially growing DNA-PK proficient but not deficient cells<sup>[1]</sup>. NU7026 synergistically sensitizes I83 cells to Chlorambucil (CLB) 3.5-fold<sup>[2]</sup>. NU7026, a novel inhibitor of the DNA repair enzyme DNA-dependent protein kinase (DNA-PK). At a dose of 10  $\mu\text{M}$ , which is nontoxic to cells *per se*, a minimum NU7026 exposure of 4 h in combination with 3 Gy radiation is required for a significant radiosensitisation effect in CH1 human ovarian cancer cells<sup>[3]</sup>.

**In Vivo:** NU7026, a novel inhibitor of the DNA repair enzyme DNA-dependent protein kinase (DNA-PK). Following intravenous administration to mice at 5 mg/kg, NU7026 underwent rapid plasma clearance (0.108 L/h) and this is largely attributed to extensive metabolism. Bioavailability following interperitoneal (i.p.) and p.o. administration at 20 mg/kg is 20 and 15%, respectively<sup>[3]</sup>.



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