

# KNK437

**Catalog No: tcsc5659**



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 25mg

**Size:** 50mg

**Size:** 100mg

**Size:** 200mg



## Specifications

**CAS No:**

218924-25-5

**Formula:**

$C_{13}H_{11}NO_4$

**Pathway:**

Metabolic Enzyme/Protease;Cell Cycle/DNA Damage

**Target:**

HSP;HSP

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 34$  mg/mL (138.65 mM)

**Alternative Names:**

Heat Shock Protein Inhibitor I

**Observed Molecular Weight:**

245.23

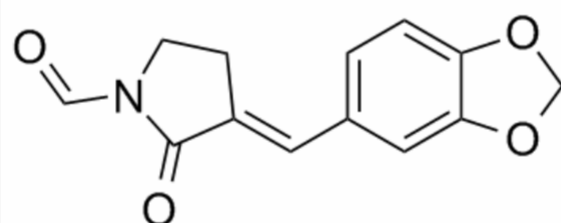
**Product Description**

KNK437 is a **HSP** inhibitor, and inhibits the induction of HSP105, HSP70, and HSP40.

IC50 & Target: HSP<sup>[1]</sup>

**In Vitro:** KNK437 inhibits the activation of several HSPs including HSP105, HSP70, and HSP40 in COLO 320DM (human colon carcinoma) cells. KNK437 (100  $\mu$ M) inhibits thermotolerance in COLO 320DM cells after the first heat treatment. KNK437 shows inhibitory effects on thermotolerance dose-dependently in COLO 320DM cells (0-200  $\mu$ M) and HeLa S3 cells (100, 200  $\mu$ M)<sup>[1]</sup>. KNK437 (100  $\mu$ M) exhibits inhibitory activities against the methylation of H3-Lys4 before or after heat-treatment in HSC4 cells and KB cells, but does not affect that of H3 Lys9. KNK437 also suppresses the expression of HSP70<sup>[3]</sup>.

**In Vivo:** KNK437 is a weakly toxic agent. KNK437 (62.5-400 mg/kg) recovers bodyweight losses of tumor-free CD-1 (ICR) mice. KNK437 (200 mg/kg) alone shows no antitumor effects and does not increase the thermosensitivity of nontolerant tumors. KNK437 improves the antitumor effects of fractionated heat treatment at 44°C at 200 mg/kg in a synergistic manner. KNK437 (200 mg/kg, i.p.) suppresses the induction of thermotolerance when administrated 6 h before the initial heating<sup>[2]</sup>.



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