

# TG003

Catalog No: tcsc2036



## Available Sizes

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

**CAS No:**

719277-26-6

**Formula:**

$C_{13}H_{15}NO_2S$

**Pathway:**

Others

**Target:**

Others

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 31$  mg/mL (124.33 mM)

**Observed Molecular Weight:**

249.33

## Product Description

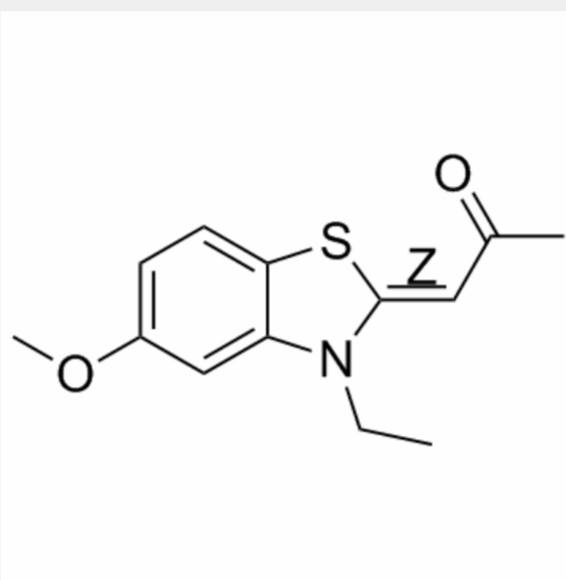
TG003 is a potent inhibitor of **Clk1/Sty**; inhibits Clk1 and Clk4 with **IC<sub>50</sub>** values of 20 and 15 nM, respectively.

IC50 & Target: IC50: 20 nM (Clk1), 200 nM (Clk2), >10  $\mu$ M (Clk3), 15 nM (Clk4)<sup>[1]</sup>

***In Vitro:***

TG003, shows the most potent effect on Clk1/Sty and Clk4 (IC<sub>50</sub>, 15–20 nM) and lesser on Clk2 (200 nM). TG003 inhibits SF2/ASF-dependent splicing of  $\beta$ -globin pre-mRNA *in vitro* by suppression of Clk-mediated phosphorylation. It suppresses serine/arginine-rich protein phosphorylation, dissociation of nuclear speckles, and Clk1/Sty-dependent alternative splicing in mammalian cells<sup>[1]</sup>. The small drug TG003 increases endogenous expression of p53 $\beta$  and p53 $\gamma$  protein isoforms by modulation of TP53 intron 9 alternative splicing<sup>[2]</sup>.

***In Vivo:*** Intrathecal injection of either TG003 (1-100 pM) or IC261 (0.1-1 nM) dose-dependently decreases mechanical allodynia and thermal hyperalgesia induced by carrageenan or CFA<sup>[3]</sup>.



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