

# **TPCA-1**

Catalog No: tcsc0045

Available Sizes

Size: 5mg

Size: 10mg

Size: 100mg

**Specifications** 

#### CAS No:

507475-17-4

## Formula:

 $\mathsf{C}_{12}\mathsf{H}_{10}\mathsf{FN}_3\mathsf{O}_2\mathsf{S}$ 

#### Pathway:

NF-ĸB

#### **Target:**

IKK

Purity / Grade:

## **Solubility:** 10 mM in DMSO

## **Observed Molecular Weight:**

279.29

## **Product Description**

TPCA-1 is a potent and selective inhibitor of **IKK-2** with  $IC_{50}$  of 17.9 nM.

IC50 & Target: IC50: 17.9 nM (IKK)

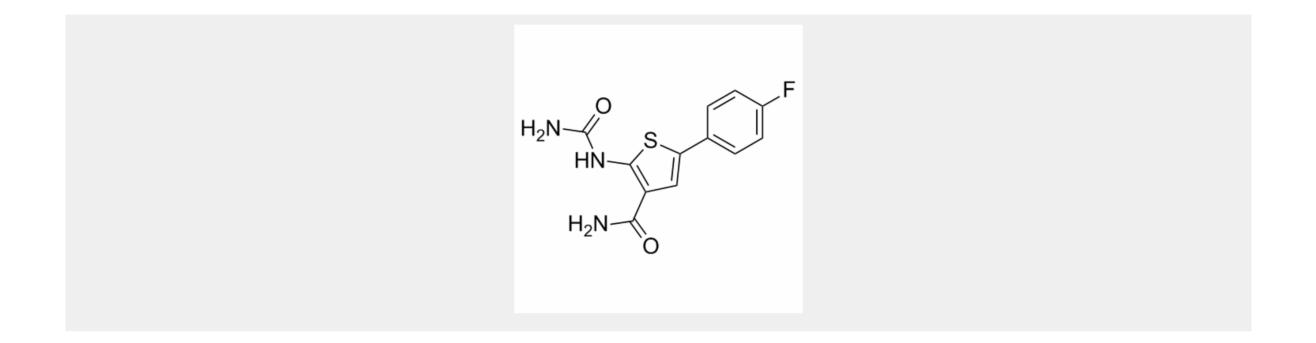
#### In Vitro:

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TPCA-1 significantly represses pro-inflammatory cytokines IL-8 and GRO- $\alpha$  in NPECs<sup>[1]</sup>. TPCA-1 inhibit NF $\kappa$ B activity as well as glioma cell proliferation and IL8 expression, and at concentrations of 2.5 and 5  $\mu$ M, it blocks the TNF-induced p65 translocation into the nucleus of U87 cells<sup>[2]</sup>. TPCA-1 inhibits lipopolysaccharide-induced human monocyte production of TNF- $\alpha$ , IL-6, and IL-8 with an IC<sub>50</sub> =170 to 320 nM<sup>[3]</sup>.

*In Vivo:* TPCA-1 (3, 10, or 20 mg/kg, i.p.) results in a dose-dependent reduction in the severity of murine collagen-induced arthritis (CIA). TPCA-1 (10 mg/kg, i.p., b.i.d.) in vivo results in significantly decreased collagen-induced T cell proliferation ex vivo<sup>[3]</sup>.



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