

# CID-2858522

Catalog No: tcsc1093



## Available Sizes

**Size:** 5mg

**Size:** 10mg



## Specifications

**CAS No:**

758679-97-9

**Formula:**

$C_{28}H_{39}N_3O_3$

**Pathway:**

NF-κB

**Target:**

NF-κB

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Observed Molecular Weight:**

465.63

## Product Description

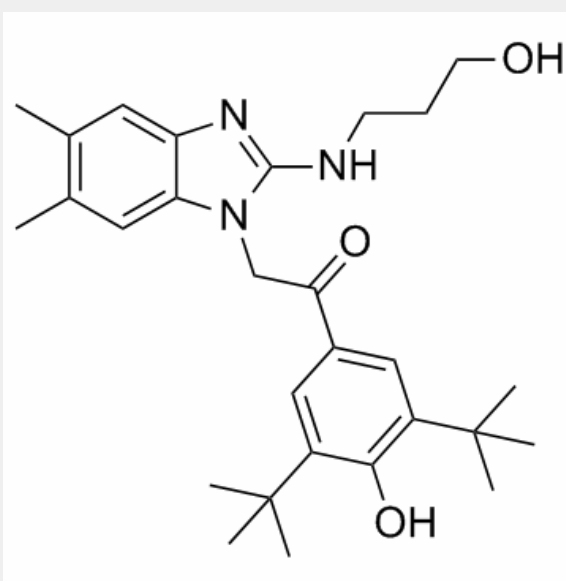
CID-2858522 is a highly potent and selective antigen receptor-mediated **NF-κB** activation inhibitor with an **IC<sub>50</sub>** of 70 nM.

IC50 & Target: IC50 : 70 nM (NF-κB)<sup>[1]</sup>

**In Vitro:** CID-2858522 (Compound 1) inhibits antigen receptor-mediated NF-κB with an IC<sub>50</sub> of 70 nM. CID-2858522 also inhibits testosterone hydroxylase in the presence of human liver microsomes (HLM) and an NADPH generating system with an IC<sub>50</sub> of 85 μM [1]

. In the HEK293 cell line used for primary screening, CID-2858522 suppresses NF-κB reporter gene activity in a concentration-dependent manner, with  $IC_{50} \sim 70$  nM and with maximum inhibition achieved at 0.25-0.5 μM. In contrast, CID-2858522 does not inhibit TNF-induced NF-κB-reporter gene activity at concentrations as high as 4 μM, thus demonstrating selectivity for the NF-κB pathway activated by PMA/Ionomycin. Cell viability assays indicate that CID-2858522 is not toxic to HEK293 cells at concentrations  $\leq 8$  μM. CID-2858522 also potently inhibits PMA/Ionomycin-induced NF-κB reporter gene activity in transient transfection assays<sup>[2]</sup>.

**In Vivo:** In vivo dose-exposure profiling of CID-2858522 (Compound 1a) is conducted using a small cohort of three male mice. CID-2858522 exhibits nonlinear pharmacokinetics, showing higher serum levels at the 0.5 h measurement time for the 30 mg/kg dose compared to 50 mg/kg but displaying typical dose-dependent behavior when measured at t=3 h. The increasing accumulation seen at a dose of 50 mg/kg may be due to a depot effect created by CYP3A4 inhibition. The cohort exhibits clear signs of morbidity at t=3 h at the 50 mg/kg dose<sup>[2]</sup>.



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