

Product Datasheet

TC ASK 10

Catalog No. **BP-02395** · CAS **1005775-56-3** · Form **free base** · Physical state **solid** · Color **White to pink** · Version **1.0** ·
 Revision **2026-09-14**

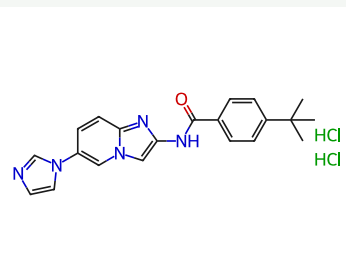
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Target MAP3K; Apoptosis	Research area Cancer
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Molecular formula **C₂₁H₂₃Cl₂N₅O**

Molecular weight **432.3460**

STRUCTURE



DESCRIPTION

TC ASK 10 (Compound 10) is a potent, selective and orally active apoptosis signal-regulating kinase 1 (ASK1) inhibitor with an IC₅₀ of 14 nM. The inhibitory activities of TC ASK 10 towards other representative panel of kinases are less than 50%, except for ASK2 (IC₅₀ of 0.51 μM)[1].

BIOLOGICAL ACTIVITY

In Vitro

TC ASK 10 (Compound 10; 0-10 μM; 1 hour; INS-1 cells) treatment inhibits streptozotocin (STZ)-induced JNK in INS-1 pancreatic β cells from 0.3 μM. Phosphorylation of p38 is also inhibited in a dosedependent manner.

In Vivo

Pharmacokinetic profiles in rats are tested. TC ASK 10 (Compound 10 HCl; rat cassette doing at 0.1 mg/kg, iv and 1 mg/kg, po.) has a good oral bioavailability. The C_{max}, T_{max} and AUC_{po,0-8h} are 285.1 ng/mL, 1.67 h and 275.4 ng.h/mL, respectively for TC ASK 10.

SOLUBILITY

soluble in DMSO

In vitro DMSO : 100 mg/mL

REFERENCES

[1]. Terao Y, et al. Design and biological evaluation of imidazo[1,2-a]pyridines as novel and potent ASK1 inhibitors. Bioorg Med Chem Lett. 2012 Dec 15;22(24):7326-9.