
Product Data Sheet

Product Name: TP0427736 HCl

Cat. No.: GC26000

Chemical Properties

Cas. No. 864374-00-5

Formula C₁₄H₁₁ClN₄S₂

M.Wt 334.85

Solubility DMSO: 67 mg/mL (200.09 mM); Water: Insoluble; Ethanol: Insoluble
Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure **Background**

TP0427736 is a potent inhibitor of ALK5 kinase activity with an IC₅₀ of 2.72 nM and this effect is 300-fold higher than the inhibitory effect on ALK3 (IC₅₀ = 836 nM for ALK3). It also inhibits Smad2/3 phosphorylation in A549 cells induced by TGF-β1 with an IC₅₀ value of 8.68 nM.

TP0427736 inhibits Smad2/3 phosphorylation in a concentration-dependent manner, with an IC₅₀ value of 8.68 nM. In a cell-based assay of outer root sheath cells, TP0427736 rescued the inhibited proliferation by TGF-β1 and TGF-β2 in a concentration-dependent manner[1].

TP0427736 decreases shortening of hair follicle length during the transition from the late anagen phase to the catagen phase[1].

[1] Naruse T, et al. Pharmacol Rep. 2017, 69(3):485-491.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA