

Product Data Sheet

Product Name: T025
Cat. No.: GC65395

Chemical Properties

Cas. No. 2407433-00-3

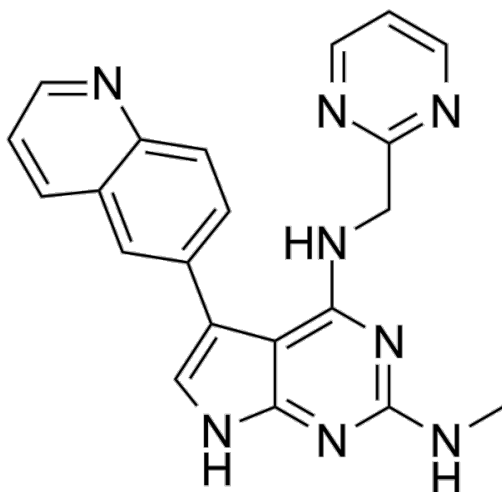
Formula C₂₁H₁₈N₈ M.Wt 382.42

Solubility DMSO : 8.25 mg/mL (21.57 mM; Need ultrasonic) 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



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

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Background

T025 is an orally active and highly potent inhibitor of Cdc2-like kinase (CLKs), with K_d values of 4.8, 0.096, 6.5, 0.61, 0.074, 1.5 and 32 nM for CLK1, CLK2, CLK3, CLK4, DYRK1A, DYRK1B and DYRK2, respectively. T025 induces caspase-3/7-mediated cell apoptosis. T025 reduces CLK-dependent phosphorylation. T025 exerts anti-proliferative activities in both hematological and solid cancer cell lines (IC₅₀ values: 30-300 nM). T025 has an anti-tumor efficiency, mainly for MYC-driven disease research[1].

T025 (0-1000 nM; 72 hours) significantly suppresses the growth of MDA-MB-468 cells in a dose-dependent manner[1]. T025 (0-1000 nM; 6 hours) reduces phosphorylation levels in MDA-MB-468 cells[1].

T025 (50 mg/kg; p.o.; 2, 4, 8 hours, Balb/c nude mice (7 to 8 week-old females).) suppress the CLK-dependent phosphorylation and induce skipping exon in various genes[1]. T025 (50 mg/kg; p.o.; twice daily on 2 days per week, for 3 weeks, Balb/c nude mice (7 to 8 week-old females).) inhibits MDA-MB-468 xenograft mice tumor growth and without affect body weight [1].

[1]. Iwai K, et al. Anti-tumor efficacy of a novel CLK inhibitor via targeting RNA splicing and MYC-dependent vulnerability. EMBO Mol Med. 2018 Jun;10(6):e8289.

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