
Product Data Sheet

Product Name: JAK2-IN-6

Cat. No.: GC65405

Chemical Properties

Cas. No. 353512-04-6

Formula C₁₄H₁₀CIN₃OS₂

M.Wt

335.83

Solubility

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

Protocol

JAK2

22.86 µg/mL (IC₅₀)

Background

JAK2-IN-6, a multiple-substituted aminothiazole derivative, is a potent and selective JAK2 inhibitor with an IC₅₀ of 22.86 µg/mL. JAK2-IN-6 shows no activity against JAK1 and JAK3. JAK2-IN-6 has anti-proliferative effect against cancer cells[1].

JAK2-IN-6 (Compound B2; 6.3-50 µg/mL; 48 hours; PC-9, H1975 and PANC-1 cells) treatment exhibits significantly antiproliferative activity against all of these cancer cell lines, with IC₅₀ values of 18.1 µg/mL, 58.3 µg/mL, 40.6 µg/mL against PC-9, H1975 and PANC-1, respectively[1]. JAK2-IN-6 (Compound B2), an intramolecular hydrogen bond is formed, holding the chlorothiophene substituent coplanar with the aminothiazole core. The chlorothiophene moiety is found to be located in the binding pocket adjacent to Val863 and Leu983, and extends towards the Asp994 of activation loop and the Gly993 of glycine-rich loop[1].

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

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[1]. Ting-Ting Yao, et al. Integration of pharmacophore mapping and molecular docking in sequential virtual screening: towards the discovery of novel JAK2 inhibitors. RSC Adv., 2017, 7, 10353-10360.

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