

BMT-090605 hydrochloride

Chemical Properties

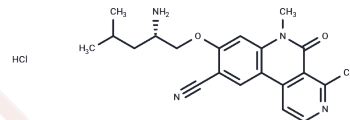
CAS No. : 2231664-45-0

Formula: C₂₁H₂₅ClN₄O₂

Molecular Weight: 400.91

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	BMT-090605 hydrochloride is an effective and selective inhibitor of connexin-2 associated kinase 1 (AAK1) (IC ₅₀ =0.6 nM). BMT-090605 hydrochloride inhibits BMP-2 induced protein kinase (BIKE) (IC ₅₀ =45 nM) and cyclin G-related kinase GAK (IC ₅₀ =60 nM). BMT-090605 hydrochloride shows anti-injury activity. BMT-090605 hydrochloride has research value in neuropathic pain.
Targets(IC ₅₀)	Others,Serine/threonin kinase,AAK1 (AP2 associated kinase 1)
In vitro	BMT-090605 hydrochloride demonstrates significant AAK1 inhibitory activity, exhibiting an IC ₅₀ of 0.63 nM [1]. Additionally, it effectively inhibits both BMP-2-inducible protein kinase (BIKE) and Cyclin G-associated kinase (GAK), with IC ₅₀ values of 45 nM and 60 nM, respectively [1].
In vivo	BMT-090605 hydrochloride (intrathecal; 0.3-3 µg/rat) induces antinociception through AAK1 inhibition in the spinal cord in male Sprague-Dawley rats subjected to chronic constriction injury (CCI) [1]. A dose-dependent decrease in thermal hyperalgesia was observed, demonstrating its efficacy in reducing pain sensations.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4943 mL	12.4716 mL	24.9433 mL
5 mM	0.4989 mL	2.4943 mL	4.9887 mL
10 mM	0.2494 mL	1.2472 mL	2.4943 mL
50 mM	0.0499 mL	0.2494 mL	0.4989 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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