

PF-670462 dihydrochloride, Casein kinase 1δ/ε inhibitor

Catalog	Unit
TBI4692-5MG	5 mg
TBI4692-25MG	25 mg

Product Details

Formal Name: 4-[3-Cyclohexyl-5-(4-fluorophenyl)imidazol-4-yl]pyrimidin-2-amine 2HCl

 $\textbf{Molecular Formula:} \ C_{19}H_{22}Cl_2FN_5$

Formula Weight: 337.40 CAS Number: 950912-80-8

Purity: >98%

 $\textbf{Formulation:} \ powder$

Solubility: Soluble in DMSO (up to at least 25 mg/ml)

Storage: -20° C **Stability:** ≥ 2 years.



Casein kinase 1δ/ε inhibitor

NH₂ N 2HCl

Functions

Potent inhibitor of casein kinase 1ε/δ (CK1ε, IC50 = 7.7 nM; CK1δ, IC50 = 14 nM). It is a circadian clock modifier that caused robust phase delays in rats1 and Cynomolgus monkeys. PF-670462 caused nuclear retention of the clock protein PER resulting in period lengthening in a phase-specific manner that was dependent on CK1δ inhibition and not CK1ε. It improved cognitive performance and reduced amyloid load in various mouse models of Alzheimer's disease. PF-670462 slowed the progression of and increased survival of chronic lymphocytic leukemia in mice alone and in combination with Ibrutinib.

Application Procedures

First dissolved in DMSO (up to at least 25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

For research use only.