

PFK15, 6-Phosphofructo-2-kinase (PFKFB3) inhibitor

Catalog	Unit
TBI4580-5MG	5 mg
TBI4580-25MG	25 mg

Product Details

Formal Name: 1-(4-Pyridinyl)-3-(2-quinolinyl)-2-propen-1-one

Molecular Formula: C₁₇H₁₂N₂O

Formula Weight: 260.29

CAS Number: 4382-63-2

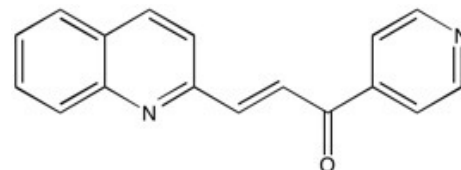
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to 15 mg/ml) or in Ethanol (up to 5 mg/ml)

Storage: -20°C

Stability: ≥ 2 years.



Applications

6-Phosphofructo-2-kinase (PFKFB3) inhibitor

Functions

PFK15 is an inhibitor of the metabolic enzyme 6-Phosphofructo-2-kinase/fructose-2,6-bisphosphatase 3 (PFKFB3). PFKFB3 is constitutively expressed by neoplastic cells and is required for the high glycolytic rate (Warburg Effect) of these cells. PFK15 inhibits PFKFB3 (IC₅₀ = 207 nM) without inhibiting 96 other kinases. PFK15 was able to potently inhibit glucose and F26BP uptake. It induced apoptosis and reduced tumor growth in vitro and in vivo. PFK15 has been shown to inhibit tumor growth in various cancer models.

Application Procedures

First dissolved in DMSO (up to 15 mg/ml) or in Ethanol (up to 5 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.