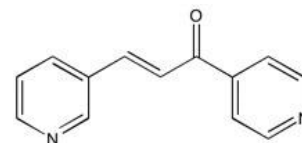


3PO, 6-Phosphofructo-2-kinase (PFKFB3) inhibitor

Catalog	Unit
TBI4609 - 10MG	10 mg
TBI4609 - 50MG	50 mg

Product Details

Formal Name: (2E)-3-(3-Pyridinyl)-1-(4-pyridinyl)-2-propen-1-one
Molecular Formula: C₁₃H₁₀N₂O
Formula Weight: 210.23
CAS Number: 18550-98-6
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

3PO (18550-98-6) 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. 3PO inhibits PFKFB3 (IC₅₀ = 1.4 – 24 μM for various cancer cell lines), suppresses glucose uptake, and lowers intracellular concentrations of Fru-2,6-BP, lactate, ATP, NAD⁺, and NADH. Inhibition of cancer cell metabolism via blocking the action of PFKFB3 has been studied in various models. Inhibition of PFKFB3 has been shown to induce autophagy as a survival mechanism in cancer cells. 3PO has also been used to reduce pathological angiogenesis.

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.

Relative Products

TBI1170	Mitomycin C
TBI1345	E64, Cysteine protease inhibitor
TBI1347	E64d, Cysteine protease inhibitor
TBI2064	Chromomycin A3
TBI2069	Cytochalasin B
TBI2794	5-EDU, DNA Click labeling probe
TBI2071	Cytochalasin D
TBI1286	Bestatin, Aminopeptidase inhibitor
TBI2140	Gemcitabine
TBI2058	Aphidicolin, DNA polymerase Inhibitor

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