

ZSTK474, PI 3-Kinase inhibitor

Catalog	Unit
TBI2180-5MG	5 mg
TBI2180-25MG	25 mg

Product Details

Formal Name: 2-(2-Difluoromethylbenzoimidazol-1-yl)-4,6-dimorpholino-1,3,5-triazine

Molecular Formula: C₁₉H₂₁F₂N₇O₂

Formula Weight: 417.41

CAS Number: 475110-96-4

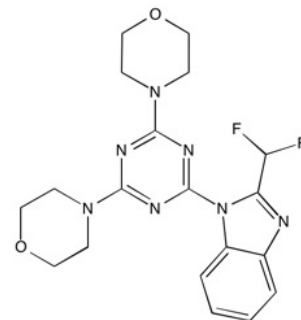
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to 20 mg/ml) or in Ethanol (up to 2.5 mg/ml with warming).

Storage: -20°C

Stability: ≥ 2 years.



Applications

PI 3-Kinase inhibitor

Functions

Novel Class I phosphatidylinositol 3-kinase (PI3K) inhibitor. ZSTK474 is an ATP-competitive inhibitor of all four Class I PI3K isoforms. However, it inhibits PI3K δ most potently, with a K_i of 1.8 nM, while inhibiting the α , β and γ isoforms at slightly higher concentrations (6.7 nM, 10.4 nM and 11.7 nM, respectively). Displays potent antitumor activity against human cancer xenografts (A549, PC-3 and WiDr) when administered to mice. It displays potent anti-inflammatory activity via modulation of human CD14⁺ monocyte-derived dendritic cell functions and suppresses experimental autoimmune encephalomyelitis. Ameliorates the progression of adjuvant-induced arthritis in a rat model.

Application Procedures

First dissolved in DMSO (up to 20 mg/ml) or in Ethanol (up to 2.5 mg/ml with warming), then diluted to aqueous buffer. Solutions in DMSO or ethanol may be stored at -20° for up to 3 months.

For research use only.