

Catalog	Unit
TBI2129-5MG	5 mg
TBI2129-25MG	25 mg

Product Details

Formal Name: 4-Amino-5-fluoro-3-[5-(4-methylpiperazin-1-yl)-1H-benzimidazol-2-yl]quinolin-2(1H)-one

Alternate Names: TKI-258; CHIR258

Molecular Formula: C₂₁H₂₁FN₆O

Formula Weight: 392.40

CAS Number: 405169-16-6

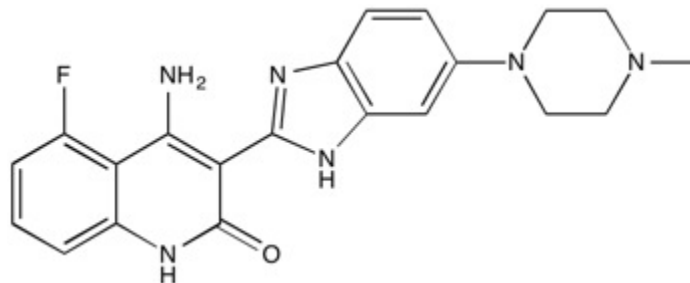
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to 30 mg/ml).

Storage: -20°C

Stability: ≥ 2 years.



Applications

Receptor tyrosine kinase inhibitor (pan-specific)

Functions

Potent receptor tyrosine kinase inhibitor. Inhibits FLT3 (IC₅₀ = 1 nM), c-KIT (IC₅₀ = 2 nM), FGFR (IC₅₀ = 8 nM), VEGFR1/2/3 (IC₅₀ = 10 nM), PDGFRβ (IC₅₀ = 27 nM), and CSF-1R (IC₅₀ = 36 nM). Selectively blocks growth B9 cells transformed by wild type or activated mutant FGFR3. Induces autophagy and apoptosis in human breast cancer cells by regulating SHP-1-dependent STAT3 inhibition. Also enhances BMP-2-induced osteoblast differentiation in mouse myoblast cells. Clinically useful cancer treatment.

Application Procedures

First dissolved in DMSO (up to 30 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 1 month.

For research use only.