

Pyridone 6, JAK inhibitor

Catalog	Unit
TBI5555 - 1MG	1 mg
TBI5555 - 5MG	5 mg

Product Details

Formal Name: 2-(tert-Butyl)-9-fluoro-1Hbenzo[h]imidazo[4,5-f]isoquinolin-7(6H)-one

Alternate Names: JAK Inhibitor I

Molecular Formula: C₁₈H₁₆FN₃O

Formula Weight: 309.34

CAS Number: 457081-03-7

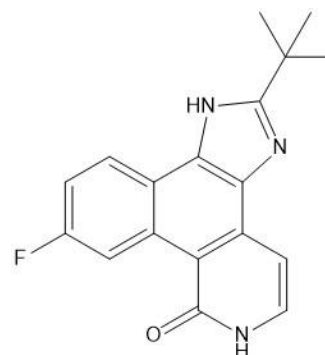
Purity: >98%

Formulation: Powder

Solubility: Soluble in DMSO (30 mg/ml)

Storage: -20°C

Stability: ≥ 2 years.



Applications

JAK inhibitor

Functions

Pyridone 6 (457081-03-7) is a potent, ATP-competitive pan-JAK inhibitor. Inhibits 1, 2 and 3 (IC₅₀ = 1, 5 and 15 nM respectively) as well as JAK family member Tyk2 (IC₅₀ = 1 nM). Also tested against 21 other kinases with inhibition ranging from 130 nM to >10 μM. Inhibits IL2 and IL4-dependent proliferation of CTLL cells. Induces intermediate mesoderm differentiation from embryonic stem cells in a cocktail with LY-294002, CCG-1423 and retinoic acid. Potently inhibits STAT1, STAT5 and STAT6 phosphorylation and ameliorates allergic skin inflammation in a mouse model. Suppresses asthmatic responses in a mouse allergic asthma model.

Application Procedures

First dissolved in DMSO (30 mg/ml), then diluted to aqueous buffer. Solutions in DMSO 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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