PRODUCT INFORMATION

RWJ 67657
Item No. 18718

CAS Registry No.: 215303-72-3
Formal Name: 4-[4-(4-fluorophenyl)-1-(3-phenylpropyl)-5-(4-pyridinyl)-1H-imidazol-2-yl]-3-butyn-1-ol
Synonym: JNJ-3026582
MF: C_{27}H_{24}FN_{3}O
FW: 425.5
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: \lambda_{max}: 241, 269 nm

Laboratory Procedures

For long term storage, we suggest that RWJ 67657 be stored as supplied at -20°C. It should be stable for at least two years.

RWJ 67657 is supplied as a crystalline solid. A stock solution may be made by dissolving the RWJ 67657 in the solvent of choice. RWJ 67657 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of RWJ 67657 in these solvents is approximately 10, 5, and 2 mg/ml, respectively.

RWJ 67657 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, RWJ 67657 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. RWJ 67657 has a solubility of approximately 0.2 mg/ml in a 1:4 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

RWJ 67657 is an orally active inhibitor of the MAP kinases p38α and p38β (IC_{50}s = 1 and 11 µM, respectively, in vitro) that is inactive against p38γ and p38δ, as well as several other kinases.\(^1\) It blocks the release of TNF-α and IL-1β from peripheral blood mononuclear cells stimulated with LPS (IC_{50}s = 3 and 11 nM, respectively) and inhibits TNF-α production in LPS-treated mice and rats.\(^1\) RWJ 67657 potently blocks the proliferation of CD4\(^+\) peripheral blood T cells induced by CD28 stimulation alone (IC_{50} = 0.5-4 nM).\(^2\) It is commonly used to study the roles of p38α and p38β in cellular and whole animal systems.\(^3-5\)

References