BAY-985
Item No. 34234

CAS Registry No.: 2409479-29-2
Formal Name: 1-[4-[[1R]-1-[2-[[6-(dimethylamino)-4-pyrimidinyl]-1H-benzimidazol-2-yl]amino]-4-pyridinyl]ethyl]-1-piperazinyl]-3,3,3-trifluoro-1-propanone
MF: C_{27}H_{30}F_{3}N_{9}O
FW: 553.6
Purity: ≥98%
UV/Vis.: λ_{max}: 266, 315 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥2 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

BAY-985 is supplied as a solid. A stock solution may be made by dissolving the BAY-985 in the solvent of choice, which should be purged with an inert gas. BAY-985 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of BAY-985 in these solvents is approximately 25 and 30 mg/ml, respectively.

BAY-985 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, BAY-985 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. BAY-985 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

BAY-985 is a dual inhibitor of TANK-binding kinase 1 (TBK1) and IκB kinase ε (IKKe; IC_{50} = 2 nM for both).\(^1\) It is selective for TBK1 and IKKe over FLT3, RSK4, DRAK1, andULK1 (IC_{50}s = 123, 276, 311, and 7,390 nM, respectively). BAY-985 inhibits phosphorylation of interferon regulatory factor 3 (IRF3) in MDA-MB-231 cells expressing mouse IRF3 (IC_{50} = 74 nM). It inhibits the proliferation of SK-MEL-2 cells in vitro (IC_{50} = 900 nM) and reduces tumor weight in an SK-MEL-2 mouse xenograft model when administered at a dose of 200 mg/kg.

Reference