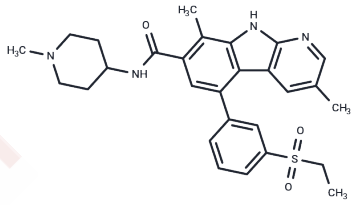
Data Sheet (Cat.No.T2709)

TAK-901

Chemical Properties



CAS No. : 934541-31-8

Formula: C28H32N4O3S

Molecular Weight: 504.64

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	TAK-901 has been used in trials studying the treatment of Lymphoma, Myelofibrosis, Multiple Myeloma, Myeloid Metaplasia, and Advanced Solid Tumors, among others.
Targets(IC50)	CDK,Aurora Kinase,JAK,Src
In vivo	A large set of kinase assays showed that TAK-901 inhibited multiple kinases (including FLT3, FGFR and Src family kinases) with IC50 values similar to those of Aurora A and B. TAK-901 inhibited Aurora A-TPX2 and Aurora B-INCENP in a tightly bound manner in a time-dependent manner.TAK-901 inhibited Aurora A-TPX2 and Aurora B-INCENP in a time-dependent manner. TAK-901 inhibited the NFkB and JAK/STAT pathways with submicromolar potency in a panel of pathway-specific reporter gene-based cell models.TAK-901 inhibited cell proliferation in human tumor cell lines from various tissues with IC50s ranging from 40 to 500 nM.TAK-901 inhibited the proliferation of human PC3 prostate cancer and HL60 acute myeloid leukemia cells in human PC3 prostate cancer and HL60 acute myeloid leukemia cells as determined by immunofluorescence and flow cytometry. Myeloid leukemia cells, consistent with Aurora B inhibition.TAK-901 inhibited Flt3 and FGFR2 autophosphorylation in cells with IC50 values close to those of Aurora B as measured by intracellular histidine H3 phosphorylation, whereas the IC50s for inhibition of intracellular Src and Bcr Abl were 20-fold weaker.

Solubility Information

Solubility	Ethanol: < 1 mg/mL (insoluble or slightly soluble), DMSO: 93 mg/mL (184.29 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9816 mL	9.9081 mL	19.8161 mL
5 mM	0.3963 mL	1.9816 mL	3.9632 mL
10 mM	0.1982 mL	0.9908 mL	1.9816 mL
50 mM	0.0396 mL	0.1982 mL	0.3963 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Pamela Farrell, et al, AACR, 2009, Abstract B270
TAK-901, a novel EPHA2 inhibitor as a therapeutic strategy against prostate cancer[J]. Cellular Signalling, 2025: 111750.
Farrell P, et al. Mol Cancer Ther. 2013, 12(4), 460-470.