

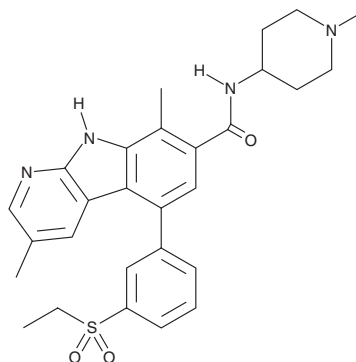
PRODUCT INFORMATION



TAK-901

Item No. 23772

CAS Registry No.: 934541-31-8
Formal Name: 5-[3-(ethylsulfonyl)phenyl]-3,8-dimethyl-N-(1-methyl-4-piperidinyl)-9H-pyrido[2,3-b]indole-7-carboxamide
MF: C₂₈H₃₂N₄O₃S
FW: 504.6
Purity: ≥98%
UV/Vis.: λ_{max}: 215, 309, 354 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

TAK-901 is supplied as a crystalline solid. A stock solution may be made by dissolving the TAK-901 in the solvent of choice. TAK-901 is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of TAK-901 in these solvents is approximately 20 mg/ml.

Description

TAK-901 is a non-selective Aurora kinase inhibitor (IC₅₀s = 3.1, 10, and 4.2 nM for Aurora A, B, and C, respectively).¹ It also inhibits JAK3, c-Src, CLK2, FGR, YES1, LRRK2, FLT3, Fyn, Abl, and FGFR2 (IC₅₀s = 1.2-6.4 nM) and several other kinases. TAK-901 inhibits Aurora kinase complexes with IC₅₀ values of 21 and 15 nM for the Aurora A and targeting protein for Xklp2 (TPX2) and Aurora B and inner centromere protein (INCENP) complexes, respectively. It decreases histone H3 phosphorylation in human prostate PC3 cancer cells (EC₅₀ = 0.16 μM) and inhibits c-Src, FAK, FGFR2, FLT3, Abl, and Axl autophosphorylation in a panel of cancer cell lines (EC₅₀s = 0.19-3.7 μM). TAK-901 inhibits the growth of lung, colon, stomach, skin, kidney, breast, ovarian, uterine, and prostate cancer cell lines (EC₅₀s = 0.043-1.5 μM). *In vivo*, TAK-901 (40 mg/kg per day, i.v.) inhibits histone H3 phosphorylation and reduces tumor growth in an A2780 ovarian cancer nude rat xenograft model. TAK-901 also inhibits tumor growth in colorectal, acute myeloid leukemia (AML), and chronic myeloid leukemia (CML) mouse xenograft models.

Reference

1. Farrell, P., Shi, L., Matuszkiewicz, J., et al. Biological characterization of TAK-901, an investigational, novel, multitargeted Aurora B kinase inhibitor. *Mol. Cancer Ther.* **12**(4), 460-470 (2013).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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