PRODUCT INFORMATION



AZD 1390

Item No. 36498

CAS Registry No.: 2089288-03-7

Formal Name: 7-fluoro-1,3-dihydro-3-methyl-

> 1-(1-methylethyl)-8-[6-[3-(1piperidinyl)propoxy]-3-pyridinyl]-2H-imidazo[4,5-c]quinolin-2-one

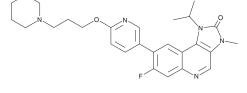
MF: $C_{27}H_{32}FN_5O_2$

FW: 477.6 **Purity:**

UV/Vis.: λ_{max} : 249, 269 nm

Supplied as: A solid -20°C Storage: Stability: ≥4 years

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



Laboratory Procedures

AZD 1390 is supplied as a solid. A stock solution may be made by dissolving the AZD 1390 in the solvent of choice, which should be purged with an inert gas. AZD 1390 is soluble in DMSO.

Description

AZD 1390 is an inhibitor of Ataxia-telangiectasia mutated (ATM) kinase (IC₅₀ = 0.78 nM).¹ It is selective for ATM over Ataxia-telangiectasia and Rad3-related protein/kinase (ATR), PI3K, mammalian target of rapamycin (mTOR), and DNA protein kinase (DNA-PK; $IC_{50}s = 30$, >12, >16, and >29.9 μ M, respectively). AZD 1390 (10 nM) sensitizes glioma cells expressing mutant, but not wild-type, p53 to ionizing radiation. Oral administration of AZD 1390 (20 mg/kg twice daily), in combination with radiation, reduces the growth of brain metastases and increases survival in an NCI H2228 lung carcinoma mouse xenograft model.

Reference

1. Durant, S.T., Zheng, L., Wang, Y., et al. The brain-penetrant clinical ATM inhibitor AZD1390 radiosensitizes and improves survival of preclinical brain tumor models. Sci. Adv. 4(6), eaat1719 (2018).

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

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.

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