PRODUCT INFORMATION A7 20



Item No. 17589

CAS Registry No.: Formal Name:	1233339-22-4 4-[4-[(3R)-3-methyl-4-morpholinyl]- 6-[1-(methylsulfonyl)cyclopropyl]-2- pyrimidinyl]-1H-indole	
MF: FW: Purity: UV/Vis.: Supplied as: Storage:	$C_{21}H_{24}N_4O_3S$ 412.5 ≥98% λ_{max} : 204, 234, 262, 334 nm A crystalline solid -20°C	
Stability:	≥4 years	

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

Laboratory Procedures

AZ 20 is supplied as a crystalline solid. A stock solution may be made by dissolving the AZ 20 in the solvent of choice, which should be purged with an inert gas. AZ 20 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of AZ 20 in these solvents is approximately 5, 30, and 50 mg/ml, respectively.

AZ 20 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AZ 20 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. AZ 20 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Ataxia telangiectasia and Rad3-related protein (ATR) is a serine/threonine kinase that activates DNA processes related to the DNA damage response. AZ 20 is a potent inhibitor of ATR ($IC_{50} = 5 \text{ nM}$).¹ It displays 7.6-fold selectivity over mTOR and minimal activity against a panel of 442 other kinases, including ataxia telangiectasia mutated. AZ 20 inhibits the growth of LoVo colorectal adenocarcinoma cells in vitro. It is orally bioavailable and significantly reduces the growth of LoVo xenografts in mice.¹

References

1. Foote, K.M., Blades, K., Cronin, A., et al. Discovery of 4-{4-[(3R)-3-methylmorpholin-4-yl]-6-[1-(methylsulfonyl)cyclopropyl]pyrimidin-2-yl}-1H-indole (AZ20): A potent and selective inhibitor of ATR protein kinase with monotherapy in vivo antitumor activity. J. Med. Chem. 56(5), 2125-2138 (2013).

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

SAFFTY DATA

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.

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