

Catalog # 10-4804 AZD1152-HQPA

CAS# 722544-51-6

3-[[7-[3-[Ethyl(2-hydroxyethyl)amino]propoxy]-4-quinazolinyl]amino-N-(3-fluorophenyl)-1H-pyrazole-5-acetamide;

Barasertib-HQPA; AZD2811

Lot # FBS2016



AZD1152-HQPA is a potent and highly selective inhibitor of Aurora B.¹ Aurora B K_i = 0.36 nM; Aurora A K_i = 1,369 nM.² It inhibits the growth of tumors in multiple cancer models.³⁻⁶ Excessive ROS generation⁷ and upregulated tumor suppressor miRNAs⁸ have been proposed as a novel mechanisms of cytotoxicity of AZD1152-HQPA.

- 1) Mortlock et al. (2007) Discovery, Synthesis, and in Vivo Activity of a New Class of Pyrazoloquinazolines as Selective Inhibitors of Aurora B Kinase; J. Med. Chem. **50** 2213
- 2) Wilkinson et al. (2007) AZD1152, a Selective Inhibitor of Aurora B Kinase, Inhibits Human Tumor Xenograft Growth by Inducing Apoptosis; Clin. Cancer Res. **13** 3682
- 3) Oke et al. (2009) AZD1152 rapidly and negatively affects the growth and survival of human acute myeloid leukemia cells in vitro and in vivo; Cancer Res. **69** 4150
- 4) Aihara et al. (2010) The selective Aurora B kinase inhibitor AZD1152 as a novel treatment for hepatocellular carcinoma; J. Hepatol. 52 63
- 5) Mori et al. (2011) Effects of AZD1152, a selective Aurora B kinase inhibitor of Burkitt's and Hodgkin's lymphomas; Biochem. Pharmacol. 82 1252
- 6) Helfrich et al. (2016) Barasertib (AZD1152), a Small Molecule Aurora B Inhibitor, Inhibits the Growth of SCLC Cell Lines In Vitro and In Vivo; Mol. Cancer Ther. **15** 2314
- 7) Zekri et al. (2017) Reactive oxygen species generation and increase in mitochondrial copy number: new insight into the potential mechanism of cytotoxicity induced by aurora kinase inhibitor, AZD1152-HQPA; Anticancer Drugs 28 841
- 8) Zekri et al. (2018) The Potential Contribution of microRNAs in Anti-cancer Effects of Aurora Kinase Inhibitor (AZD1152-HQPA); J. Mol. Neurosci. 65 444

PHYSICAL DATA

Molecular Weight:	507.56
Molecular Formula:	C ₂₆ H ₃₀ FN ₇ O ₃
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (15 mg/ml)
Physical Description:	Yellow solid
Storage and Stability:	Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in
	DMSO may be stored at -20°C for up to 1 month.

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