

# Barasertib-HQPA

Catalog No: tcsc0163



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

**CAS No:**

722544-51-6

**Formula:**

$C_{26}H_{30}FN_7O_3$

**Pathway:**

Cell Cycle/DNA Damage;Epigenetics

**Target:**

Aurora Kinase;Aurora Kinase

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 22$  mg/mL (43.34 mM)

**Alternative Names:**

AZD2811; INH-34; AZD1152-HQPA

**Observed Molecular Weight:**

507.56

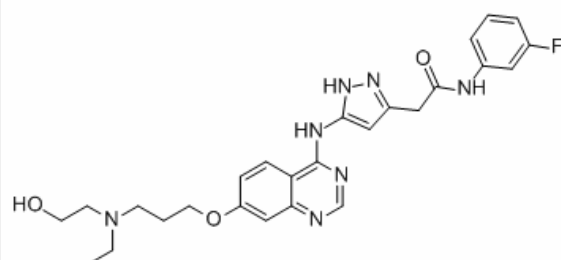
## Product Description

AZD1152-HQPA is a highly selective **Aurora B** inhibitor with **IC<sub>50</sub>** of 0.37 nM in a cell-free assay, and appr 3700 fold more selective for Aurora B over Aurora A.

IC50 & Target: IC50: 0.37 nM (Aurora B)<sup>[2]</sup>

**In Vitro:** AZD1152 displays >3000-fold selectivity for Aurora B as compared with Aurora A which has an IC<sub>50</sub> of 1.368 μM. AZD1152 has even less activity against 50 other serine-threonine and tyrosine kinases including FLT3, JAK2, and Abl. AZD1152 inhibits the proliferation of hematopoietic malignant cells such as HL-60, NB4, MOLM13, PALL-1, PALL-2, MV4-11, EOL-1, THP-1, and K562 cells with IC<sub>50</sub> of 3-40 nM, displaying appr 100-fold potency than another Aurora kinase inhibitor ZM334739 which has IC<sub>50</sub> of 3-30 μM. AZD1152 inhibits the clonogenic growth of MOLM13 and MV4-11 cells with IC<sub>50</sub> of 1 nM and 2.8 nM, respectively, as well as the freshly isolated imatinib-resistant leukemia cells with IC<sub>50</sub> values of 1-3 nM, more significantly compared with bone marrow mononuclear cells with IC<sub>50</sub> values of >10 nM. AZD1152 induces accumulation of cells with 4N/8N DNA content, followed by apoptosis in a dose- and time-dependent manner<sup>[2]</sup>. AZD1152-HQPA treatment induces defective cell survival, polyploidy, and cell death in LNCaP cell line. AZD1152-HQPA also decreases expression of AR<sup>[3]</sup>.

**In Vivo:** AZD1152 (10-150 mg/kg/day) significantly inhibits the growth of a variety of human solid tumor xenografts, including colon, breast, and lung cancers, in a dose-dependent manner<sup>[1]</sup>. Administration of AZD1152 (25 mg/kg) alone markedly suppresses the growth of MOLM13 xenografts, confirmed by the observation of necrotic tissue with infiltration of phagocytic cells<sup>[2]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!