#### **BI2536**

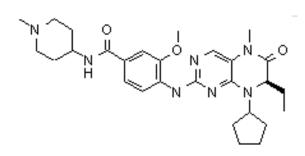
# REAGENTS DIRECT

# 5 mg

# For research purposes only

BI2536 is a small molecule inhibitor of Polo Like Kinase 1 (PLK1). PLK1 is a serine/threonine protein kinase and is a key regulator of multiple processes essential to mitosis and cell division. Inhibition of PLK1 by BI2536 results in mitotic arrest, disruption of cytokinesis and apoptosis in tumor cell populations. BI2536 has been shown to inhibit growth of xenographs in nude mice and induces regression of large tumors with well tolerated intravenous dose regimens.

## **TECHNICAL INFORMATION**



**Other Names:** (R)-4-[(8-Cyclopentyl-7-ethyl-5,6,7,8-tetrahydro-5-methyl-6-oxo-2-pteridinyl)amino]-3-methoxy-N-(1-methyl-4-piperidinyl)benzamide

Chemical Formula: C<sub>28</sub>H<sub>39</sub>N<sub>7</sub>O<sub>3</sub>

CAS Number: 755038-02-9

Molecular Weight: 521.66

**Purity: >98%** 

**Appearance:** solid powder

Solubility: DMSO

## STORAGE AND HANDLING

**Storage:** Store at 4°C and protected from light. Following reconstitution, store aliquots at -20°C.

Stability: Stock solutions stable at -20°C for up to 2 years.

**Shipping Conditions:** Shipped at room temperature.

#### **PRODUCT USE**

Soluble in DMSO to 10 mM. Note: for most cells, the maximum tolerance to DMSO is <0.5%. If a precipitate is observed, vortex for 5 minutes.

#### REFERENCES

- Grinshtein et al. (2011) Small molecule kinase inhibitor screen identifies polo-like kinase 1 as target for neuroblastoma tumor-initiating cells. Cancer Res. 71(4):1385 -95.
- 2. Manchado et al. Targeting mitotic exit leads to tumor regression in vivo: modulation by Cdk1, Mastl, and the PP2A/ B55 $\alpha$ , $\delta$  phosphatase. Cancer Cell. 18(6):641-654.
- 3. Lenart et al. (2007) The small-molecule inhibitor BI 2536 reveals novel insights into mitotic roles of pololike kinase 1. Curr Biol. 17(4):304-15.

