

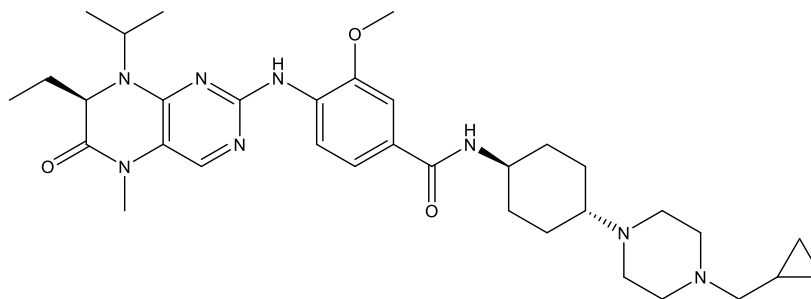
**Catalog # 10-4818**

**Volasertib**

CAS# 755038-65-4

*N*-[4-[4-(Cyclopropylmethyl)piperazin-1-yl]cyclohexyl]-4-[[*(7R)*-7-ethyl-5-methyl-6-oxo-8-propan-2-yl-7*H*-pteridin-2-yl]amino]-3-methoxybenzamide; BI 6727

Lot # FBS2020



Volasertib is an extremely potent and selective inhibitor ( $IC_{50}$ 's: Plk1= 0.87 nM, Plk2 = 5 nM, Plk3 = 56 nM) of Polo-like kinase 1, a critical controller of multiple essential steps of mitosis.<sup>1</sup> It has shown efficacy in multiple solid xenograft tumors models<sup>1</sup> and in clinical studies in patients with acute myeloid leukemia<sup>2</sup>. Volasertib has also been shown to potently inhibit BRD4<sup>3</sup> ( $K_d$  = 79 nM<sup>3</sup>,  $IC_{50}$ 's bromodomains 1 and 2 of BRD4 = 300 and 770 nM respectively<sup>2</sup>).

- 1) Rudolph *et al.* (2009) *BI 6727, a Polo-like kinase inhibitor with improved pharmacokinetic profile and broad antitumor activity*; Clin. Cancer Res. **15** 3094
- 2) Rudolph *et al.* (2015) *Efficacy and Mechanism of Action of Volasertib, a Potent and Selective Inhibitor of Polo-Like Kinases, in Preclinical Models of Acute Myeloid Leukemia*; J. Pharmacol. Exp. Ther. **352** 579
- 3) Ciceri *et al.* (2014) *Dual kinase-bromodomain inhibitors for rationally designed polypharmacology*; Nat. Chem. Biol. **10** 305

**PHYSICAL DATA**

Molecular Weight:	618.82
Molecular Formula:	C <sub>34</sub> H <sub>50</sub> N <sub>8</sub> O <sub>3</sub>
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (>25 mg/ml)
Physical Description:	Off-white 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.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**