

Catalog # 10-4011 Selinexor

CAS# 1393477-72-9

(Z)-3-[3-[3,5-Bis(trifluoromethyl)phenyl]-1,2,4-triazol-1-yl]-N'-pyrazin-2-ylprop-2-enehydrazide; KPT-330 Lot # FBS2040

Selinexor is a potent inhibitor of the nuclear export receptor, chromosome region maintenance 1 (CRM1; Exportin-1 (XPO1)). It exhibited potent growth suppression in various T-cell acute lymphoblastic leukemia (T-ALL) cells (IC_{50} 's = 34-203 nM)¹ and pancreatic cancer cells ($IC_{50} \sim 150$ nM)². Selinexor is being investigated as a possible chemotherapeutic in treating multiple types of cancer.³⁻⁸ Currently in clinical trials.

- 1) Etchin et al. (2013), KPT-330 inhibitor of CRM1 (XPO1)-mediated nuclear export has selective anti-leukaemic activity in preclinical models of T-ALL and AML; Br. J. Haematol. **161** 117
- Azmi et al. (2013), Selective Inhibitors of Nuclear Export Block Pancreatic Cancer Cell Proliferation and Reduce Tumor Growth in Mice;
 Gastroenterology 144 447
- 3) Desisto et al. (2019), Exportin 1 inhibition induces nerve growth factor receptor expression to inhibit the NF-kB pathway in preclinical models of pediatric high-grade glioma; Mol. Cancer Ther. Epub ahead of print
- 4) Aboukameel et al. (2018), Down-regulation of AR splice variants through XPO1 suppression contributes to the inhibition of prostate cancer progression; Oncotarget 9 35327
- 5) Baek et al. (2018), XPO1 inhibition by selinexor induces potent cytotoxicity against high grade bladder malignancies; Oncotarget 9 34567
- 6) Wahba et al. (2018), The XPO1 Inhibitor Selinexor Inhibits Translation and Enhances the Radiosensitivity of Glioblastoma Cells Grown In Vitro and In Vivo; Mol. Cancer Ther. 17 1717
- 7) Arango et al. (2017), Selinexor (KPT-330) demonstrates anti-tumor efficacy in preclinical models of triple-negative breast cancer; Breast Cancer Res. 19 93
- 8) Conforti et al. (2017), Therapeutic Effects of XPO1 Inhibition in Thymic Epithelial Tumors; Cancer Res. 77 5614

PHYSICAL DATA

Molecular Weight: 443.31

Molecular Formula: $C_{17}H_{11}F_6N_7O$ Purity: >98% TLC

NMR: (Conforms)

Solubility: Soluble in DMSO (>25 mg/ml); ethanol (>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. Store solutions

at -20°C for up to 2 months.

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