

## Catalog # 10-4672 Luminespib

CAS# 747412-49-3

5-(2,4-Dihydroxy-5-propan-2-ylphenyl)-*N*-ethyl-4-[4-(morpholin-4-ylmethyl)phenyl]-1,2-oxazole-3-carboxamide; NVP-AUY922; VER-52296

Lot # FBS2198



Luminespib is a potent inhibitor (IC<sub>50</sub> = 21 nM) of HSP90.<sup>1</sup> It is active against various human tumor xenograft models acting via several processes including cytostasis, apoptosis, invasion, and angiogenesis.<sup>2,3</sup> Luminespib enhances tumor susceptibility to T-cell-based immunotherapy by re-invigorating the cancer-immunity cycle in NANOG<sup>+</sup> cancer cells.<sup>4</sup> It also acts as a radiosensitizer against various tumor cells.<sup>5-7</sup>

- 1) Brough *et al.* (2008), *4*,5-*Diarylisoxazole Hsp90 chaperone inhibitors: potential therapeutic agents for the treatment of cancer;* J. Med. Chem. **51** 196
- 2) Eccles et al. (2008), NVP-AUY922: a novel heat shock protein 90 inhibitor active against xenograft tumor growth, angiogenesis, and metastasis; Cancer Res. 68 2850
- 3) Massey et al. (2010), Preclinical antitumor activity of the orally available heat shock protein 90 inhibitor; Mol. Cancer Ther. 5 1807
- 4) Song et al. (2020), HSP90A inhibition promotes anti-tumor immunity by reversing multi-modal resistance and stem-like property of immunerefractory tumors; Nat. Commun. **11** 562
- 5) Schwab and Multhoff (2022), A Low Membrane Hsp70 Expression in Tumor Cells With Impaired Lactate Metabolism Mediates Radiosensitization by NVP-AUY922; Front. Oncol. **12** 861266
- 6) Djuzenova et al. (2012), Hsp90 inhibitor NVP-AUY922 enhances radiation sensitivity of tumor cells lines under hypoxia; Cancer Biol. Ther. 13 425
- 7) Schilling et al. (2015), Sensitizing tumor cells to radiation by targeting the heat shock response; Cancer Lett. 360 294

## PHYSICAL DATA

Molecular Weight:	465.54
Molecular Formula:	$C_{26}H_{31}N_3O_5$
Purity:	99% HPLC
	NMR: (Conforms)
Solubility:	Soluble in DMSO (>25 mg/ml)
Physical Description:	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. Focus Biomolecules LLC 400 Davis Drive, Suite 600 Plymouth Meeting PA 19462 www.focusbiomolecules.com