

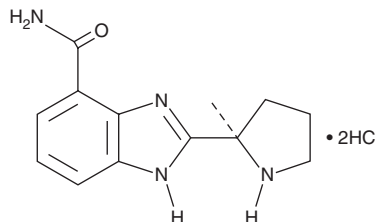
PRODUCT INFORMATION



ABT-888 (hydrochloride)

Item No. 11505

CAS Registry No.: 912445-05-7
Formal Name: 2-[(2R)-2-methyl-2-pyrrolidinyl]-1H-benzimidazole-7-carboxamide, dihydrochloride
Synonym: Veliparib
MF: C₁₃H₁₆N₄O • 2HCl
FW: 317.2
Purity: ≥98%
UV/Vis.: λ_{max}: 269, 292 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

ABT-888 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the ABT-888 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. ABT-888 (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of ABT-888 (hydrochloride) in these solvents is approximately 0.1, 15, and 0.25 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of ABT-888 (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of ABT-888 (hydrochloride) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Poly(ADP-ribose) polymerases (PARPs) have diverse roles in cellular processes, including DNA repair and apoptosis.^{1,2} ABT-888 is an orally bioavailable inhibitor of PARP1 and PARP2 (K_is = 5.2 and 2.9 nM, respectively).³ It enhances apoptosis and autophagy in response to treatments that cause DNA breaks, including radiation and DNA alkylation.^{4,5} ABT-888 also acts synergistically with chemotherapies to increase the lethal effects of radiation in cancer cells.^{6,7}

References

1. Davar, D., Beumer, J.H., Hamieh, L., *et al. Curr. Med. Chem.* **19(23)**, 3907-3921 (2012).
2. Javle, M. and Curtin, N.J. *Ther. Adv. Med. Oncol.* **3(6)**, 257-267 (2011).
3. Donawho, C.K., Luo, Y., Penning, T.D., *et al. Clin. Cancer Res.* **13(9)**, 2728-2737 (2007).
4. Albert, J.M., Cao, C., Kim, K.W., *et al. Clin. Cancer Res.* **13(10)**, 3033-3042 (2007).
5. Liu, X., Luo, X., Shi, Y., *et al. Cancer Biol. Ther.* **7(6)**, 934-941 (2008).
6. Shelton, J.W., Waxweiler, T.V., Landry, J., *et al. Int. J. Radiat. Oncol. Biol. Phys.* **86(3)**, 469-476 (2013).
7. Shunkwiler, L., Ferris, G., and Kunos, C. *Int. J. Mol. Sci.* **14(2)**, 3773-3785 (2013).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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