

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: $C_{13}H_{16}N_4O \cdot 2HCl$

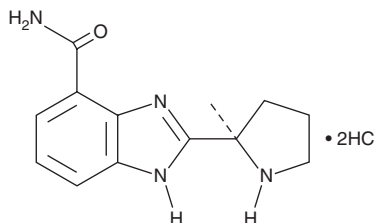
FW: 317.2

Purity: $\geq 98\%$

Stability: ≥ 2 years at $-20^{\circ}C$

Supplied as: A crystalline solid

UV/Vis.: λ_{max} : 269, 292 nm



Laboratory Procedures

For long term storage, we suggest that ABT-888 (hydrochloride) be stored as supplied at $-20^{\circ}C$. It should be stable for at least two years.

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. ABT-888 (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. 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_i s = 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

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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).
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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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