

PRODUCT INFORMATION

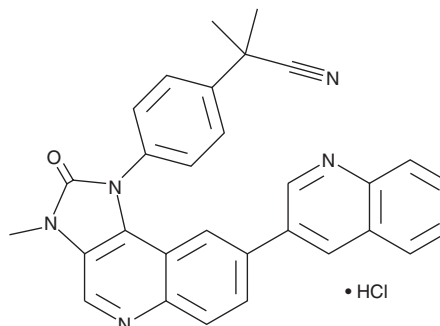


NVP-BEZ235 (hydrochloride)

Item No. 21185

CAS Registry No.: 2319647-83-9
Formal Name: 4-[2,3-dihydro-3-methyl-2-oxo-8-(3-quinolinyl)-1H-imidazo[4,5-c]quinolin-1-yl]- α,α -dimethyl-benzeneacetonitrile, monohydrochloride

Synonym: Dactolisib
MF: C₃₀H₂₃N₅O • HCl
FW: 506.0
Purity: ≥98%
UV/Vis.: λ_{max} : 267 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

NVP-BEZ235 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the NVP-BEZ235 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. NVP-BEZ235 (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of NVP-BEZ235 (hydrochloride) in ethanol and DMF is approximately 0.5 mg/ml and approximately 1 mg/ml in DMSO.

Description

NVP-BEZ235 is a potent dual inhibitor of phosphatidylinositol 3-kinase (PI3K) and mTOR that is well tolerated, displays disease stasis when administered orally, and enhances the efficacy of other anticancer agents when used in *in vivo* combination studies.^{1,2} It inhibits PI3K isoforms and mutants with low nanomolar IC₅₀ values, leading to growth arrest in the G₁ phase.^{1,3} Through its effects on PI3K, NVP-BEZ235 inhibits VEGF-induced angiogenesis.⁴ By directly blocking cell growth and indirectly inhibiting angiogenesis, it has potential in both solid tumors and in metastatic melanoma therapy.^{5,6}

References

1. Maira, S.M., Stauffer, F., Brueggen, J., *et al.* *Mol. Cancer Ther.* **7(7)**, 1851-1863 (2008).
2. Zitzmann, K., von Rueden, J., Brand, S., *et al.* *Cancer Lett.* **295(1)**, 100-109 (2010).
3. Serra, V., Markman, B., Scaltriti, M., *et al.* *Cancer Res.* **68(19)**, 8022-8030 (2008).
4. Schnell, C.R., Stauffer, F., Allegrini, P.R., *et al.* *Cancer Res.* **68(16)**, 6598-6607 (2008).
5. Marone, R., Erhart, D., Mertz, A.C., *et al.* *Mol. Cancer Res.* **7(4)**, 601-613 (2009).
6. Brachmann, S.M., Hofmann, I., Schnell, C., *et al.* *Proc. Natl. Acad. Sci. USA* **106(52)**, 22299-22304 (2009).

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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