

# PRODUCT INFORMATION



**VX-984**

Item No. 42072

**CAS Registry No.:** 1476074-39-1

**Formal Name:** N-methyl-8-[(1S)-1-methyl-2-[(2'-methyl[4,5'-bipyrimidin-6-yl-4',6'-d<sub>2</sub>)amino]ethyl]-4-quinolinecarboxamide

**Synonym:** M-9831

**MF:** C<sub>23</sub>H<sub>21</sub>D<sub>2</sub>N<sub>7</sub>O

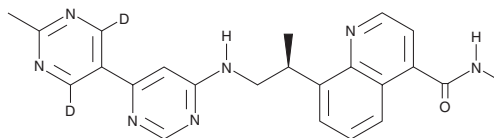
**FW:** 415.5

**Purity:** ≥95%

**Supplied as:** A 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

VX-984 is supplied as a solid. A stock solution may be made by dissolving the VX-984 in the solvent of choice, which should be purged with an inert gas. VX-984 is soluble DMSO.

## Description

VX-984 is an inhibitor of DNA protein kinase (DNA-PK).<sup>1</sup> It inhibits radiation-induced increases in phosphorylated DNA-PK levels in U251 and NSC11 glioblastoma cells when used at concentrations of 250 or 500 nM. VX-984 (1 μM) induces mutagenic NHEJ and homologous recombination DNA repair pathways in a reporter assay using U2OS cells.<sup>2</sup> It potentiates radiation-induced cytotoxicity and DNA damage in U251 and NSC11 cells when used at concentrations of 250 or 500 nM.<sup>1</sup> *In vivo*, VX-984 (50 mg/kg twice per day), in combination with radiation, increases survival in a U251 orthotopic mouse xenograft model.

## References

1. Timme, C.R., Rath, B.H., O'Neill, J.W., *et al.* The DNA-PK inhibitor VX-984 enhances the radiosensitivity of glioblastoma cells grown *in vitro* and as orthotopic xenografts. *Mol. Cancer Ther.* **17(6)**, 1207-1216 (2018).
2. Khan, A.J., Misenko, S.M., Thandoni, A., *et al.* VX-984 is a selective inhibitor of non-homologous end joining, with possible preferential activity in transformed cells. *Oncotarget* **9(40)**, 25833-25841 (2018).

### 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.

### WARRANTY AND LIMITATION OF REMEDY

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