

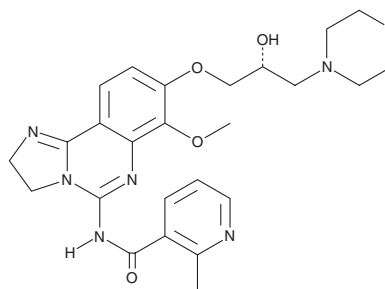
# PRODUCT INFORMATION



**BAY-1082439**

Item No. 35456

**CAS Registry No.:** 1375469-38-7  
**Formal Name:** N-[2,3-dihydro-8-[(2R)-2-hydroxy-3-(4-morpholinyl)propoxy]-7-methoxyimidazo[1,2-c]quinazolin-5-yl]-2-methyl-3-pyridinecarboxamide  
**MF:** C<sub>25</sub>H<sub>30</sub>N<sub>6</sub>O<sub>5</sub>  
**FW:** 494.6  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 227, 275 nm  
**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

BAY-1082439 is supplied as a solid. A stock solution may be made by dissolving the BAY-1082439 in the solvent of choice, which should be purged with an inert gas. BAY-1082439 is soluble in DMSO.

## Description

BAY-1082439 is an inhibitor of PI3Kα, PI3Kβ, and PI3Kδ (IC<sub>50</sub>s = 5, 15, and 1 nM, respectively).<sup>1</sup> It is selective for PI3Kα, -β, and -δ over PI3Kγ (IC<sub>50</sub> = 52 nM). BAY-1082439 selectively inhibits proliferation of *PTEN*-null LNCaP and PC3 prostate cancer cells over wild-type *PTEN* isogenic PC3 cells. BAY-1082439 (75 mg/kg) decreases intratumoral levels of phosphorylated Akt and reduces tumor growth in a mouse model of castration-resistant prostate cancer using castrated *Pten* conditional knockout mice (*Pten*-null mice). Intermittent administration of BAY-1082439 (180 mg/kg) reverses resistance to an anti-PD-1 antibody and induces CD8<sup>+</sup> T cell clonal expansion and T cell-mediated inflammation in the tumor microenvironment in castrated *Pten*-null mice.<sup>2</sup>

## References

1. Zou, Y., Qi, Z., Guo, W., et al. Cotargeting the cell-intrinsic and microenvironment pathways of prostate cancer by PI3Kα/β/δ inhibitor BAY1082439. *Mol. Cancer Ther.* **17**(10), 2091-2099 (2018).
2. Qi, J., Xu, Z., Zhang, L., et al. Overcoming resistance to immune checkpoint therapy in PTEN-null prostate cancer by intermittent anti-PI3Kα/β/δ treatment. *Nat. Commun.* **13**(1), 182 (2022).

### 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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