

Data Sheet

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 Product Name
 : ZY-444

 Cat. No.
 : PC-47056

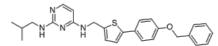
 CAS No.
 : 1802650-31-2

 Molecular Formula
 : C₂₆H₂₈N₄OS

 Molecular Weight
 : 444.597

 Target
 : Other Targets

 Solubility
 : 10 mM in DMSO



Biological Activity

ZY-444 is a specific metabolic inhibitor of **pyruvate carboxylase**, a key anaplerotic enzyme of the tricarboxylic acid cycle (TCA cycle), suppresses breast cancer growth and metastasis through inhibiting the Wnt/ β -catenin/Snail signaling pathway.

ZY-444 displayed potent efficacy against cancer proliferation and invasion but much less toxicity to normal cells.

ZY-444 selectively inhibited invasive breast cancer (BCA) proliferation (IC90=5 uM), migration, and invasion.

ZY-444 suppressed BCA growth, metastasis, and lung colonization in vivo.

ZY-444 is an inhibitor of pyruvate carboxylase (PC) by binding to and inhibiting its enzymatic activity without influencing PC expression.

ZY-444 inhibited the Wnt signaling pathway in MDA-MB-231 cells.

References

Qingxiang Lin, et al. *Adv Sci (Weinh)*. 2020 Mar 12;7(9):1903483.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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