

Data Sheet

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Product Name : Dorsomorphin dihydrochloride

CAS No. : PC-43521 **CAS No.** : 1219168-18-9 **Molecular Formula** : C₂₄H₂₇Cl₂N₅O

Molecular Weight : 472.41
Target : AMPK

Solubility :

H-CI H-CI

Biological Activity

Dorsomorphin (BML-275, Compound C) dihydrochloride is a potent, selective and reversible **AMPK** inhibitor with Ki of 109 nM, shows no no significant activity on ZAPK, SYK, PKCθ, PKA and JAK3.

Dorsomorphin inhibits AMPK activation induced by AICAR and Metformin, also inhibits bone morphogenetic protein (BMP) type I receptors (ALK2, ALK3 and ALK6).

Dorsomorphin promotes cardiomyogenesis in mouse embryonic stem cells (ESCs) in vitro, induces autophagy in cancer cell lines via a mechanism independent of AMPK inhibition.

References

Yu PB, et al. *Nat Chem Biol.* 2008 Jan;4(1):33-41.

Vucicevic L, et al. *Autophagy*. 2011 Jan;7(1):40-50.

Diekmann U, et al. Stem Cells Dev. 2015 Jan 15;24(2):190-204.

Zhou G, et al. *J Clin Invest*. 2001 Oct;108(8):1167-74.

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

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