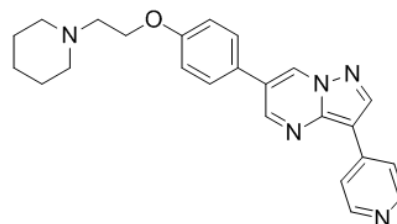


**Product Name** : Dorsomorphin  
**Cat. No.** : PC-43522  
**CAS No.** : 866405-64-3  
**Molecular Formula** : C<sub>24</sub>H<sub>25</sub>N<sub>5</sub>O  
**Molecular Weight** : 399.49  
**Target** : AMPK  
**Solubility** : 10 mM in DMSO



## Biological Activity

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

Dorsomorphin (BML-275, Compound C) inhibits AMPK activation induced by AICAR and Metformin, also inhibits bone morphogenetic protein (BMP) type I receptors (ALK2, ALK3 and ALK6).

Dorsomorphin (BML-275, Compound C) 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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