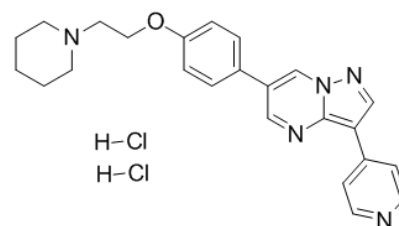


**Product Name** : Dorsomorphin dihydrochloride  
**Cat. No.** : PC-43521  
**CAS No.** : 1219168-18-9  
**Molecular Formula** : C<sub>24</sub>H<sub>27</sub>Cl<sub>2</sub>N<sub>5</sub>O  
**Molecular Weight** : 472.41  
**Target** : AMPK  
**Solubility** :



## Biological Activity

Dorsomorphin (BML-275, Compound C) dihydrochloride is a potent, selective and reversible **AMPK** inhibitor with  $K_i$  of 109 nM, shows no significant activity on ZAPK, SYK, PKC $\theta$ , 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

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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!**

E-mail: tech@probechem.com