

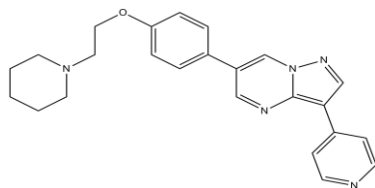
## Dorsomorphin

**ALTERNATE NAME:** 6-[4-(2-Piperidin-1-yl)-ethoxy-phenyl]-3-pyridin-4-yl-pyrazolo[1,5-a]-pyrimidine; Compound C

**CATALOG #:** 1686-5

**AMOUNT:** 5 mg

**STRUCTURE:**



**MOLECULAR FORMULA:** C<sub>24</sub>H<sub>25</sub>N<sub>5</sub>O

**MOLECULAR WEIGHT:** 399.49

**CAS NUMBER:** 866405-64-3

**APPEARANCE:** Light yellow solid

**SOLUBILITY:** DMSO (~4 mg/ml). May require sonication for complete solubilization

**PURITY:** >98% by HPLC

**STORAGE:** Store at -20°C. Protect from air and light.

**DESCRIPTION:** Cell-permeable. A potent, selective, reversible and ATP-competitive inhibitor of AMP-activated protein kinase (AMPK) (K<sub>i</sub> = 109 nM in the presence of 5 μM ATP and no AMP). Does not affect the activity on several structurally related kinases including JAK3, PKA, PKCθ, SYK and ZAPK. Also inhibits bone morphogenic protein (BMP) type I receptors (ALK2, ALK3 and ALK6). In addition, recently Dorsomorphin has shown to induce protective autophagy in cancer cells through AMPK inhibition-independent blockade of Akt/mTOR pathway.

**REFERENCES:**

1. Yu, P.B., *et al.* (2008). *Nat. Chem. Biol.* **4**, 33-41.
2. Kim, E.K., *et al.* (2004). *J. Biol. Chem.* **279**, 19970.

**HANDLING:** Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

**FOR RESEARCH USE ONLY! Not to be used on humans.**

**RELATED PRODUCTS:**

- A 83-1 (Cat. No. 1725-1)
- SB-431542 (Cat. No. 1674-1)