

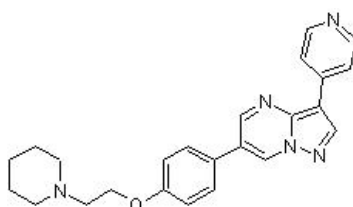
Product datasheet

Dorsomorphin (Compound C), AMP-kinase inhibitor ab120843

[48 References](#) [2 Images](#)

Overview

Product name	Dorsomorphin (Compound C), AMP-kinase inhibitor
Description	Potent, selective and reversible AMP-kinase inhibitor. Selective for BMP signaling.
Biological description	Potent, selective and reversible inhibitor of AMP-kinase ($K_i = 109$ nM). Inhibits AMPK activation induced by AICAR (ab120358) and metformin (ab120847). Selective inhibitor of bone morphogenetic protein (BMP) type I receptors (ALK2, ALK3 and ALK6). Does not affect ZAPK, SYK, PKC θ , PKA and JAK3. Cell-permeable. Also available in a water soluble form (Dorsomorphin dihydrochloride - ab144821)
Purity	> 99%
CAS Number	866405-64-3
Chemical structure	



Properties

Chemical name	6-[4-[2-(1-Piperidiny)ethoxy]phenyl]-3-(4-pyridinyl)pyrazolo[1,5-a]pyrimidine
Molecular weight	399.49
Molecular formula	C ₂₄ H ₂₅ N ₅ O
PubChem identifier	11524144
Storage instructions	Store at +4°C. Store under desiccating conditions. The product can be stored for up to 12 months.
Solubility overview	Soluble in DMSO to 10 mM (with heating) and to ethanol to 5 mM (with heating)
Handling	Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.

Please note that sonication in a 55 °C water bath is necessary for dissolution of ab120843 in DMSO to 10 mM.

Refer to SDS for further information.

Need more advice on solubility, usage and handling? Please visit our [frequently asked questions \(FAQ\) page](#) for more details.

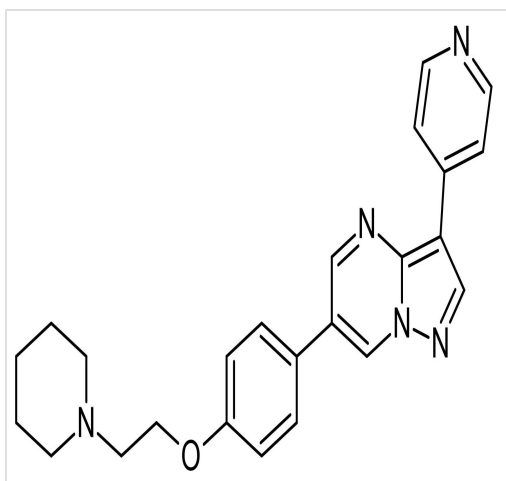
SMILES

c1c(cnc2c(cnn12)c3ccncc3)c5ccc(OCCN4CCCCC4)cc5

Source

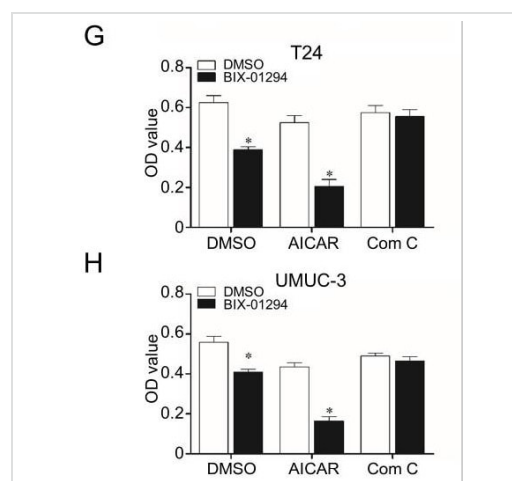
Synthetic

Images



Chemical Structure - Dorsomorphin (Compound C),
AMP-kinase inhibitor (ab120843)

2D chemical structure image of ab120843, Dorsomorphin
(Compound C), AMP-kinase inhibitor



Functional Studies - Dorsomorphin (Compound C),
AMP-kinase inhibitor (ab120843)

Li et al PLoS One. 2015 Sep 23;10(9):e0138390. doi:
10.1371/journal.pone.0138390. eCollection 2015. Fig 6.
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G9a inhibition induces autophagy and autophagic cell death through AMPK/mTOR pathway.

T24 cells (Panel G) and UMUC-3 cells (Panel H) were pre-treated with compound C (5 μ M) or AICAR (1 mM) and then treated with BIX-01294 (1.5 μ M) for 48 h. Cells viability was assessed by MTT assay. * P <0.01.

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