

AT9283 SYN-1011

1-cyclopropyl-3-(3-(5-(morpholinomethyl)-1H-benzo[d]imidazol-2-yl)-1H-pyrazol-4-yl)urea

CAS Registry No.: 896466-04-9

Smiles String:

c1cc2c(cc1CN3CCOCC3)nc([nH]2)c4c(c[nH]n4)NC(=0)NC5CC5

Molecular Weight: 381.43

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Molecular Formula: C19H23N7O2

Lot Number: Refer to vial

1H-NMR: Available on request

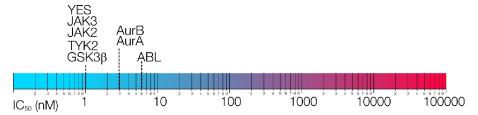
HPLC (Purity): > 95.0% @ 254 nm

ES-MS: Available on request

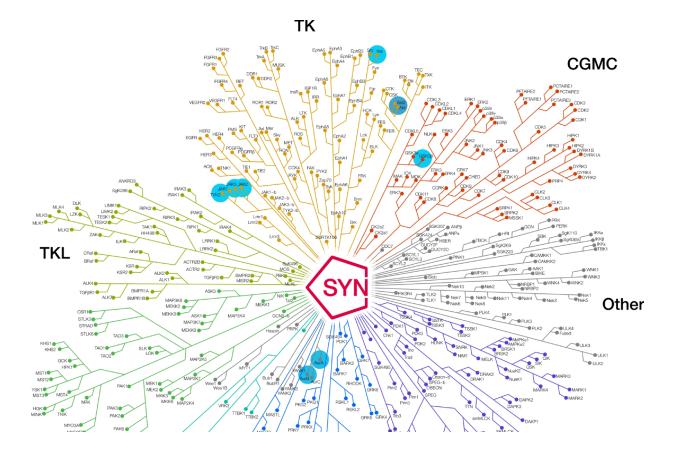
Description:

Aurora kinases play a key role in the regulation of mitosis and in recent years have become attractive targets for the treatment of cancer. AT9283 is a powerful inhibitor of Aurora A and B kinases as well as several other important kinases including JAK2 and AbI (T315I). AT9283 has also been shown effective in mouse xenograft models and has been studied as a possible clinical candidate. Effective IC50 doses for Aurora kinases are in the low 2-3 nM range, and inhibition of a number of other kinases including JAK2 has been reported at 1-10nM.

Biological Activity



Kinome Mapping



Shipping and Storage Temperature

Shipping:

Ambient

Storage:

2 years -20C, Powder 1 month, -4C in DMSO, More than one month -80C in DMSO

Solubility

DMSO 76 mg/mL, Ethanol 38 mg/mL

Preparing Stock Solutions

Stock Solution (1ml DMSO)	1mM	10mM	20mM	50mM
Mass(mg)	0.3815	3.8150	7.6300	19.0750

References

- 1. Pollard JR, Mortimore M . Discovery and development of aurora kinase inhibitors as anticancer agents. J Med Chem. 2009 May 14;52(9):2629-51. doi: 10.1021/jm8012129.
- 2. Howard S, Berdini V, Boulstridge JA, Carr MG, Cross DM, Curry J, Devine LA, Early TR, Fazal L, Gill AL, Heathcote M, Maman S, Matthews JE, McMenamin RL, Navarro EF, O'Brien MA, O'Reilly M, Rees DC, Reule M, Tisi D, Williams G, Vinković M, Wyatt PG. Fragment-based discovery of the pyrazol-4-yl urea (AT9283), a multitargeted kinase inhibitor with potent aurora kinase activity. J Med Chem. 2009 Jan 22;52(2):379-88. doi: 10.1021/jm800984v.
- 3. Zheng Y, Zheng M, Ling X, Liu Y, Xue Y, An L, Gu N, Ji M. Design, synthesis, quantum chemical studies and biological activity evaluation of pyrazole-benzimidazole derivatives as potent Aurora A/B kinase inhibitors. Bioorg Med Chem Lett. 2013 Jun 15;23(12):3523-30. doi: 10.1016/j.bmcl.2013.04.039. Epub 2013 Apr 25.

Ordering Information

To order more of this or any other SYNkinase compound, go to synkinase.com, Call us Toll Free (US Only) at 1-877-854-6273 or email orders@synkinase.com.

Product Datasheet (Rev. 1.1)