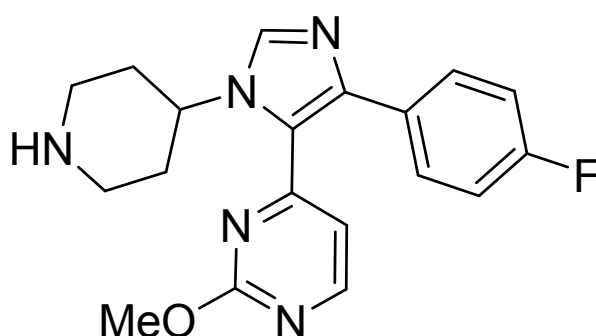


**SB-242235****SYN-1076**

4-(4-(4-fluorophenyl)-1-(piperidin-4-yl)-1H-imidazol-5-yl)-2-methoxypyrimidine

CAS Registry No.: 193746-75-7

**Smiles String:**COc1nccc(n1)c2c(ncn2C3CCNCC3)c4ccc(cc4)F

Molecular Weight: 353.39

Molecular Formula: C<sub>19</sub>H<sub>20</sub>FN<sub>5</sub>O

Lot Number: Refer to vial

<sup>1</sup>H-NMR: Available on request

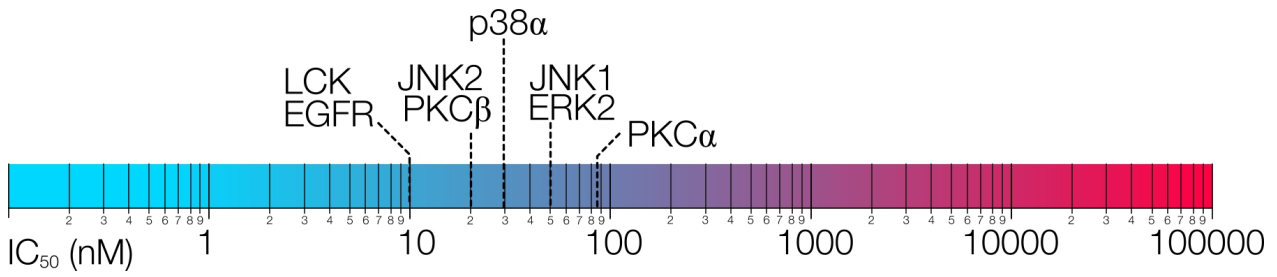
HPLC (Purity): &gt; 95.0% @ 254 nm

ES-MS: Available on request

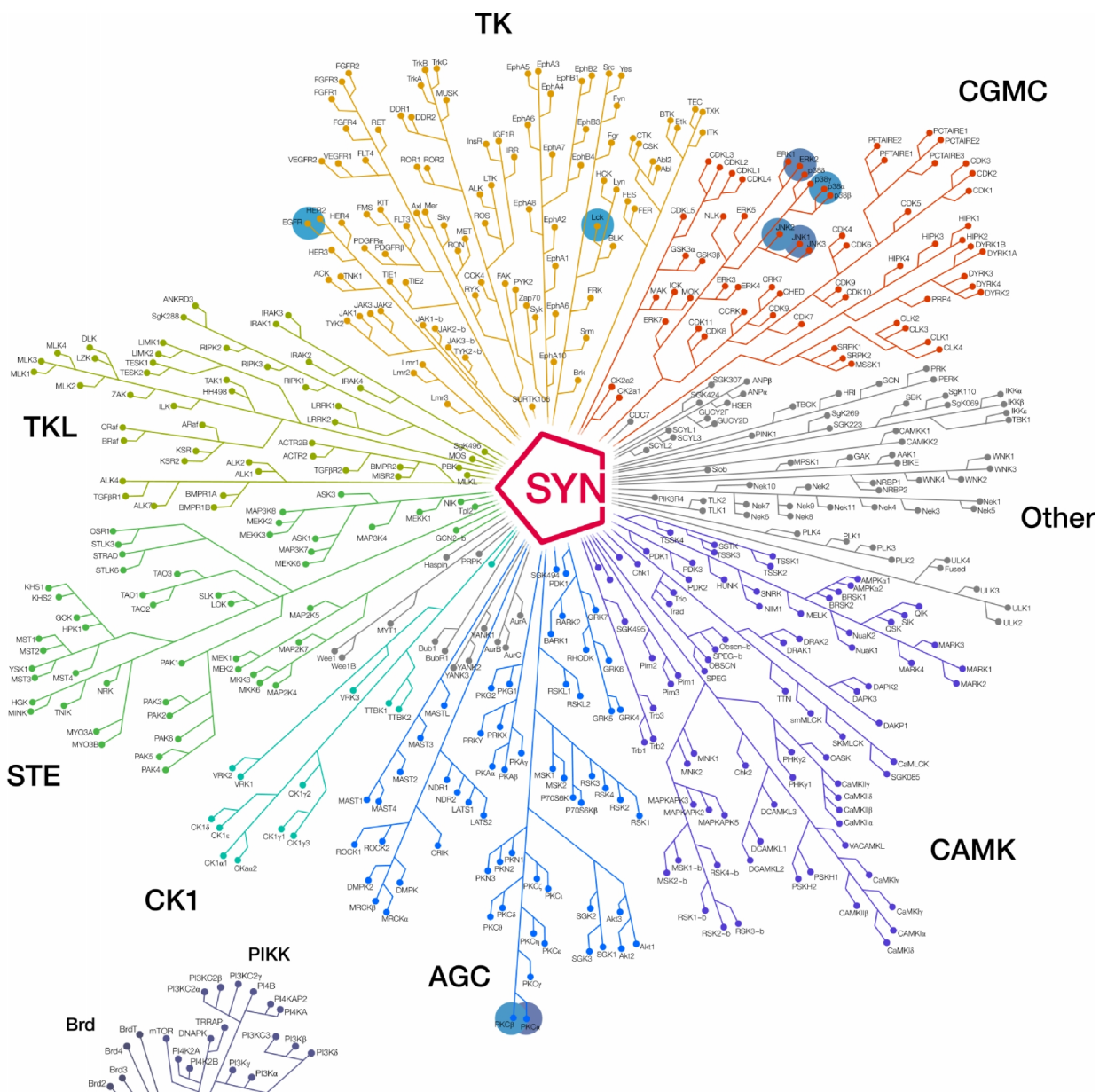
**Description:**

The p38 mitogen-activated protein kinase (MAPK) signaling pathway is activated by numerous inflammatory mediators and environmental stresses. SB-242235 is a potent and moderately selective p38 MAP kinase inhibitor that may be an effective therapy for cytokine-mediated diseases such as autoimmune or inflammatory diseases. SB-242235 exhibits good oral availability in preclinical studies and has micromolar or submicromolar in vivo IC<sub>50</sub> values. However it is clear from studies examining SB-242235 effects on metabolism, for instance in chondrocytes and human cartilage that SB-242235 effects can be pleiotropic between species and that care must be taken when studying the interactions of multi-target inhibitors such as SB-242235.

# Biological Activity



# Kinome Mapping



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## Shipping and Storage Temperature

### Shipping:

Ambient

### Storage:

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

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## Solubility

15 mM in DMSO

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## Preparing Stock Solutions

Stock Solution (1ml DMSO)	1mM	10mM	20mM	50mM
Mass(mg)	0.3533	3.5339	7.0678	17.6695

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## References

1. Adams JL, Boehm JC, Gallagher TF, Kassis S, Webb EF, Hall R, Sorenson M, Garigipati R, Griswold DE, Lee JC. Pyrimidinylimidazole inhibitors of p38: cyclic N-1 imidazole substituents enhance p38 kinase inhibition and oral activity. *Bioorg Med Chem Lett.* 2001 Nov 5;11(21):2867-70.
  2. Badger AM, Griswold DE, Kapadia R, Blake S, Swift BA, Hoffman SJ, Stroup GB, Webb E, Rieman DJ, Gowen M, Boehm JC, Adams JL, Lee JC. Disease-modifying activity of SB 242235, a selective inhibitor of p38 mitogen-activated protein kinase, in rat adjuvant-induced arthritis. *Arthritis Rheum.* 2000 Jan;43(1):175-83.
  3. Ward KW, Proksch JW, Salyers KL, Azzarano LM, Morgan JA, Roethke TJ, McSurdy-Freed JE, Levy MA, Smith BR. SB-242235, a selective inhibitor of p38 mitogen-activated protein kinase. I: preclinical pharmacokinetics. *Xenobiotica.* 2002 Mar;32(3):221-33.
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## Ordering Information

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

Product Datasheet (Rev. 1.1)