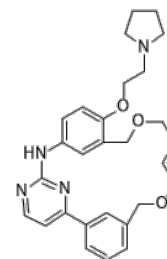


**Product Name** : Pacritinib  
**Cat. No.** : PC-22993  
**CAS No.** : 937272-79-2  
**Molecular Formula** : C<sub>28</sub>H<sub>32</sub>N<sub>4</sub>O<sub>3</sub>  
**Molecular Weight** : 472.59  
**Target** : JAK  
**Solubility** : 10 mM in DMSO



## Biological Activity

Pacritinib (SB1518) is a potent, selective JAK2/FLT3 inhibitor with IC<sub>50</sub> of 23 and 19 nM for JAK2(WT) and JAK2(V617F), and IC<sub>50</sub> of 22 nM for FLT3.

Pacritinib (SB1518) selectivity against JAK1 and JAK3 (IC<sub>50</sub>) = 1280 and 520 nM, respectively).

Pacritinib (SB1518) shows potent effects on cellular JAK/STAT pathways, inhibiting tyrosine phosphorylation on JAK2 (Y221) and downstream STATs.

Pacritinib (SB1518) has potent anti-proliferative effects on myeloid and lymphoid cell lines driven by mutant or wild-type JAK2 or FLT3, resulting from cell cycle arrest and induction of apoptosis.

Pacritinib (SB1518) significantly reduces splenomegaly and hepatomegaly in a JAK2(V617F)-driven disease model.

Pacritinib (SB1518) dose-dependently inhibits intra-tumor JAK2/STAT5 signaling, leading to tumor growth inhibition in a subcutaneous model generated with SET-2 cells derived from a JAK2(V617F) patient with megakaryoblastic leukemia.

## References

Hart S, et al. Blood Cancer J. 2011 Nov;1(11):e44.

William AD, et al. J Med Chem. 2011 Jul 14;54(13):4638-58.

Hart S, et al. Leukemia. 2011 Nov;25(11):1751-9.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

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