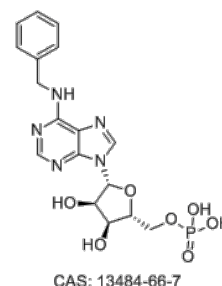


**Product Name** : IST5-002  
**Cat. No.** : PC-20634  
**CAS No.** : 13484-66-7  
**Molecular Formula** : C<sub>17</sub>H<sub>20</sub>N<sub>5</sub>O<sub>7</sub>P  
**Molecular Weight** : 437.34  
**Target** : STAT  
**Solubility** : 10 mM in DMSO



## Biological Activity

IST5-002 is a specific small molecule targeting **STAT5 SH2-domain**, inhibits both **Stat5a/b** phosphorylation and dimerization, robustly inhibits transcriptional activity of Stat5a (IC<sub>50</sub>=1.5 μM) and Stat5b (IC<sub>50</sub>=3.5 μM) in PC-3 cells.

IST5-002 blocks Bcr-Abl-induced Stat5a/b phosphorylation at 5 μM in Bcr-Abl-positive K562 cells.

IST5-002 blocks phosphorylation of Stat5a/b (CWR22Rv1, IC<sub>50</sub>=22 μM; HC-11, IC<sub>50</sub>=12 μM; T47D, IC<sub>50</sub>=24.8 μM), while total Stat5a/b levels remains unaffected.

IST5-002 shows no specific inhibition of other kinases in a panel of 50 kinases, does not block transcriptional activity of Stat3.

IST5-002 suppresses downstream signaling events and target gene expression induced by Stat5a/b in PC and CML cells.

IST5-002 suppresses Stat5a/b-mediated growth of PC through induction of apoptosis in experimental models of PC in vitro, in vivo and ex vivo.

## References

Liao Z, et al. *Mol Cancer Ther.* 2015 Aug;14(8):1777-93.

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

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