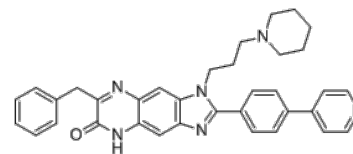


**Product Name** : CTA056  
**Cat. No.** : PC-35182  
**CAS No.** : 1265822-30-7  
**Molecular Formula** : C<sub>35</sub>H<sub>34</sub>N<sub>6</sub>O  
**Molecular Weight** : 554.698  
**Target** : ITK  
**Solubility** : 10 mM in DMSO



## Biological Activity

CTA056 (CTA 056) is a potent, selective inhibitor of interleukin-2-inducible T-cell kinase (**ITK**) with IC<sub>50</sub> of ~100 nM, also inhibits Btk (IC<sub>50</sub>=400 nM), but shows no significant inhibition for Etk (BMX kinase, IC<sub>50</sub>=5 μM).

CTA056 shows selectivity for Itk over other Tec family members; inhibits the phosphorylation of Itk and its effectors including PLC-γ, Akt, and ERK, as well as the decreased secretion of targeted genes such as IL-2 and IFN-γ in treated Jurkat and MOLT-4 cells.

CTA056 also exhibits apoptosis-inducing potential in Jurkat cells.

CTA056 demonstrates cytotoxic effect in xenograft models of T-cell leukemia and lymphoma.

## References

Guo W, et al. *Mol Pharmacol*. 2012 Nov;82(5):938-47.

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

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