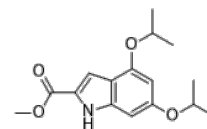


**Product Name** : XST-14  
**Cat. No.** : PC-25239  
**CAS No.** : 2607143-50-8  
**Molecular Formula** : C<sub>16</sub>H<sub>21</sub>NO<sub>4</sub>  
**Molecular Weight** : 291.35  
**Target** : ULK  
**Solubility** : 10 mM in DMSO



### Biological Activity

XST-14 is a potent, highly selective inhibitor for Unc-51-Like Kinase 1 (ULK1) with IC<sub>50</sub> of 13.6 nM and SPR K<sub>D</sub> of 30.75 nM. XST-14 (5 μM) only inhibits 6 out of 403 kinases by at least 75%, including ULK1 (MAP2K1/MEK1, MAPK14/p38 alpha, TGFBR2, ACVR1/ALK2, ULK2 and CAMK2A IC<sub>50</sub> of 721.8, 283.9, 809.3, 183.8, 70.9, and 66.3 nM, respectively). XST-14 inhibits autophagy by reducing ULK1 kinase activity, strongly inhibits the conversion of LC3-I to LC3-II. XST-14 inhibited the Ser249 phosphorylation of PIK3C3 and Ser15 phosphorylation of BECN1. XST-14 acts synergistically with sorafenib to suppress HCC in vitro. XST-14 acts synergistically with sorafenib to suppress HCC tumor growth.

### References

Xue ST, et al. Autophagy. 2020 Oct;16(10):1823-1837.

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

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