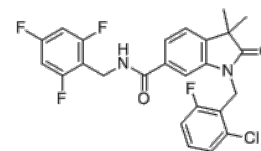


**Product Name** : STING activator Compound 53  
**Cat. No.** : PC-73368  
**CAS No.** : 2259624-71-8  
**Molecular Formula** : C<sub>25</sub>H<sub>19</sub>ClF<sub>4</sub>N<sub>2</sub>O<sub>2</sub>  
**Molecular Weight** : 490.883  
**Target** : STING  
**Solubility** : 10 mM in DMSO



### Biological Activity

STING activator Compound 53 is a potent small molecule activator of human **STING** with functional EC<sub>50</sub> of 183 nM in immortalised and primary cells.

Compound 53 directly activates STING from across the major protein variants found in the human population and from both recombinant and primary cells.

Compound 53 induces a broad panel of cytokines and markers of dendritic cell maturation consistent with its activation of STING.

Compound 53 binds to a cryptic pocket in the STING transmembrane domain, between the two subunits of the STING dimer. promotes the oligomerization and activation of human STING through a mechanism orthogonal to that of cGAMP. Compound 53 triggers outward shifts of transmembrane helices in the dimer, and induces inter-dimer interactions between these helices to mediate the formation of the high-order oligomer.

### References

Lu D, et al. *Nature*. 2022 Apr 6. doi: 10.1038/s41586-022-04559-7.

David C Pryde, et al. *Eur J Med Chem*. 2021 Jan 1;209:112869.

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

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