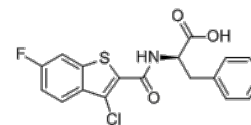


**Product Name** : CU-CPT4a  
**Cat. No.** : PC-20180  
**CAS No.** : 1279713-77-7  
**Molecular Formula** : C<sub>18</sub>H<sub>13</sub>ClFNO<sub>3</sub>S  
**Molecular Weight** : 377.81  
**Target** : Toll-like Receptor (TLR)  
**Solubility** : 10 mM in DMSO



## Biological Activity

TLR3/dsRNA Complex Inhibitor (**CU-CPT4a**, TLR3i) is a specific small molecule inhibitor targeting the dsRNA binding region of **TLR3** with  $K_i$  of 2.96  $\mu$ M, blocks Poly (I:C)-induced TLR3 activation with  $IC_{50}$  of 3.44  $\mu$ M.

TLR3/dsRNA Complex Inhibitor (TLR3i) inhibits TLR3 signaling without affecting other TLRs (TLR1/2, TLR2/6, TLR3, TLR4, and TLR7).

TLR3/dsRNA Complex Inhibitor disrupts the TLR3/dsRNA association by directly targeting the RNA-binding site on TLR3.

TLR3/dsRNA Complex Inhibitor also inhibits the downstream signaling transduction mediated by the formation of the TLR3/dsRNA complex. TLR3/dsRNA Complex Inhibitor abolishes the TNF- $\alpha$  and IL-1 $\beta$  production activated by 15  $\mu$ g/ml Poly (I:C) in the RAW 264.7 cells with  $IC_{90}$  of 27  $\mu$ M.

## References

Cheng K, et al. *J Am Chem Soc.* 2011 Mar 23;133(11):3764-7.

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

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