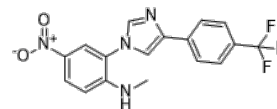


**Product Name** : CU-T12-9  
**Cat. No.** : PC-25127  
**CAS No.** : 1821387-73-8  
**Molecular Formula** : C<sub>17</sub>H<sub>13</sub>F<sub>3</sub>N<sub>4</sub>O<sub>2</sub>  
**Molecular Weight** : 362.31  
**Target** : Toll-like Receptor (TLR)  
**Solubility** : 10 mM in DMSO



CAS: 1821387-73-8

### Biological Activity

CU-T12-9 is a specific TLR1/2 agonist with EC<sub>50</sub> of 52.9 nM, directly targets TLR1/2 to initiate downstream signaling, induces TLR1/2 heterodimerization.

CU-T12-9 can strongly activate the SEAP signaling in HEK-Blue cells overexpressing hTLR2, but not in other TLR-overexpressing cells, including TLR3, TLR4, TLR5, TLR7, and TLR8.

CU-T12-9 selectively activates the TLR1/2 heterodimer, but not TLR2/6.

CU-T12-9 activates downstream signaling through TLR1/2 and NF-κB signaling pathway, CU-T12-9, at 5 μM, shows comparable activation to 66 nM (100 ng/ml) Pam3CSK4.

CU-T12-9 efficiently triggers NO production in Raw 264.7 cells and also in primary rat macrophage cells.

CU-T12-9 up-regulates the mRNA levels of TLR1, TLR2, TNF, IL-10, and iNOS.

CU-T12-9 not only selectively activates the TLR1/2 signaling pathway but also induces TLR1/2 heterodimerization.

### References

Cheng K, et al. Sci Adv. 2015;1(3):e1400139.

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

E-mail: tech@probechem.com