# STING agonist-22

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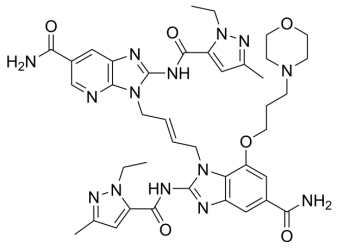
| **Cat. No.:** | HY-152955 |
| **CAS No.:** | 2408723-12-4 |
| **Molecular Formula:** | $C_{40}H_{48}N_{14}O_6$ |
| **Molecular Weight:** | 820.9 |
| **Target:** | STING |
| **Pathway:** | Immunology/Inflammation |
| **Storage:** | Powder -20°C 3 years<br>In solvent -80°C 6 months<br>-20°C 1 month |



## SOLVENT & SOLUBILITY

**In Vitro**

DMSO : 100 mg/mL (121.82 mM; Need ultrasonic)

| Preparing Stock Solutions | Mass / Solvent / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|---|
| | 1 mM | 1.2182 mL | 6.0909 mL | 12.1818 mL |
| | 5 mM | 0.2436 mL | 1.2182 mL | 2.4364 mL |
| | 10 mM | 0.1218 mL | 0.6091 mL | 1.2182 mL |

Please refer to the solubility information to select the appropriate solvent.

## BIOLOGICAL ACTIVITY

**Description**

STING agonist-22 (CF501) is a potent non-nucleotide STING agonist. STING agonist-22 is a adjuvant by activating STING to induce the type I interferon (IFN-I) response and proinflammatory cytokine production. STING agonist-22 can be used as an adjuvant to boost the original protein vaccine, producing potent, broad, and long-term immune protection. STING agonist-22 can be used for SARS-CoV-2 variants and sarbecovirus diseases research[1].

**In Vitro**

STING agonist-22 (CF501) leads to rapid and robust activation of innate immune responses in THP-1 cells[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

**In Vivo**

STING agonist-22 (CF501) robustly, but transiently, activates innate immunity with acceptable safety profile in mice[1].

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| Animal Model: | Balb/c mice (female, six weeks old)[1] |
| Dosage: | 20, 75 μg |

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| Administration: | Intramuscular injection |
| Result: | Although innate immunity was activated only transiently by CF501, it should be sufficient to stimulate the required humoral and cellular immune responses. The half-life of CF501 was 0.5 h and there was no detectable CF501 in the plasma after 2 h of the injection. |

## REFERENCES

[1]. Liu Z, et al. A novel STING agonist-adjuvanted pan-sarbecovirus vaccine elicits potent and durable neutralizing antibody and T cell responses in mice, rabbits and NHPs. Cell Res. 2022 Mar;32(3):269-287.



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