

Gardiquimod trifluoroacetate

Catalog No: tcsc0032944



Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

1159840-61-5

Formula:

$C_{21}H_{25}F_6N_5O_5$

Pathway:

Immunology/Inflammation;Anti-infection

Target:

Toll-like Receptor (TLR);HIV

Purity / Grade:

>98%

Solubility:

DMSO : 100 mg/mL (184.69 mM; Need ultrasonic)

Observed Molecular Weight:

541.44

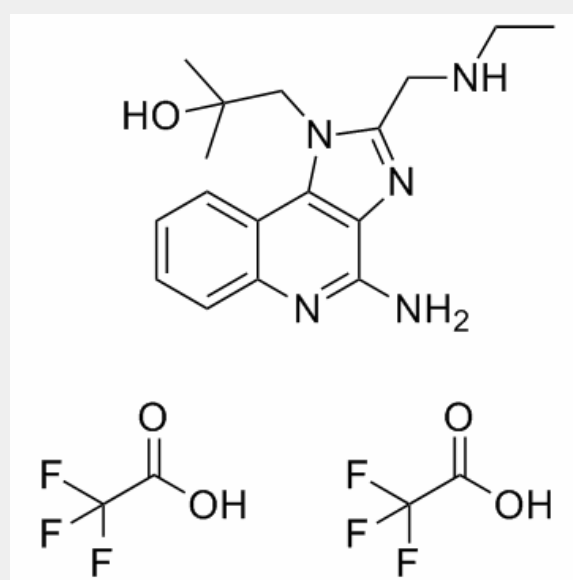
Product Description

Gardiquimod trifluoroacetate is a specific **TLR7** agonist which can also inhibit **HIV-1 reverse transcriptase**.

IC50 & Target: TLR7, HIV-1 reverse transcriptase^[1]

In Vitro: Levels of HIV-1 DNA measured by real-time PCR are significantly lower in Gardiquimod trifluoroacetate-treated cells compare to untreated controls on day 9 postinfection. Significantly lower levels of HIV-1 DNA and HIV-1 p24 are observed in Gardiquimod trifluoroacetate-treated and HIV-1-exposed macrophages cocultured with activated PBMCs. Gardiquimod trifluoroacetate significantly increases IFN- α mRNA levels 80-, 20-, and 35-fold above the level of detection at 2, 4, and 6 h posttreatment, respectively^[1]. The results show that treatment with Gardiquimod trifluoroacetate results in significant increases in expression of CD69 on T, NK and natural killer T (NKT) cells. It is also found that Gardiquimod trifluoroacetate stimulation increases mRNA expression of IL-12 p40 in RAW264.7 cells. Furthermore, Gardiquimod trifluoroacetate induces augmented secretion of IL-12 p70 into culture supernatant 48 and 72 h after treatment^[2].

In Vivo: On day 12, the tumor volume in mice injected with PBS increases to $1770 \pm 370 \text{ mm}^3$, whereas it is only $230 \pm 70 \text{ mm}^3$ in mice treated with Gardiquimod trifluoroacetate^[2].



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