

# 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

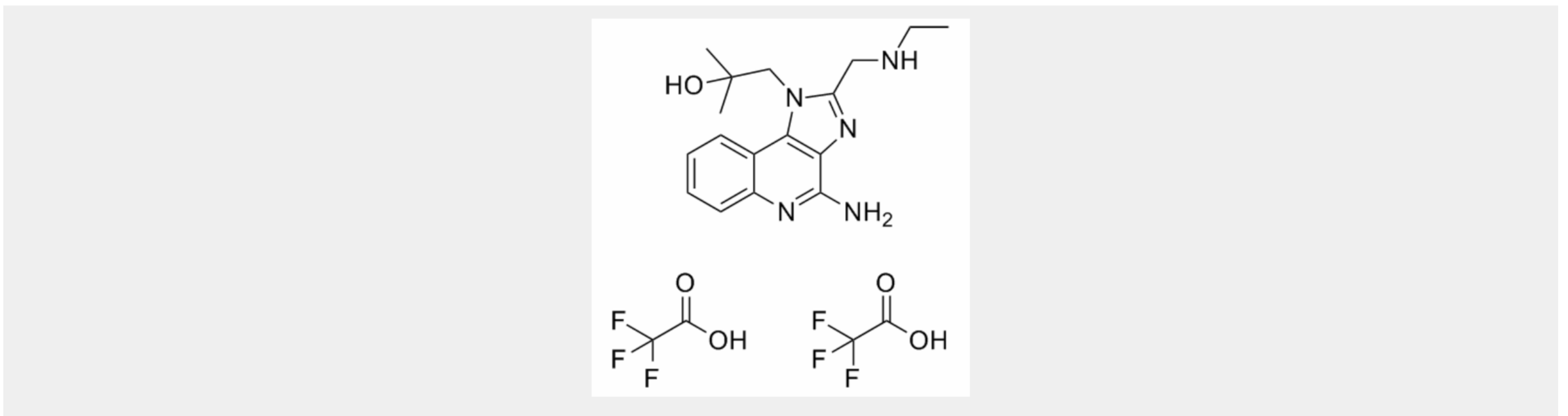
## Product Description

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

IC50 & Target: TLR7, HIV-1 reverse transcriptase<sup>[1]</sup>

**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- $\alpha$  mRNA levels 80-, 20-, and 35-fold above the level of detection at 2, 4, and 6 h posttreatment, respectively<sup>[1]</sup>. 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<sup>[2]</sup>.

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



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!