Gardiquimod

Cat. No.: HY-103697
CAS No.: 1020412-43-4
Molecular Formula: C₁₇H₂₃N₅O
Molecular Weight: 313.4
Target: Toll-like Receptor (TLR); HIV
Pathway: Immunology/Inflammation; Anti-infection
Storage: Please store the product under the recommended conditions in the COA.

BIOLOGICAL ACTIVITY

Description
Gardiquimod, an imidazoquinoline analog, is a TLR7/8 agonist. Gardiquimod could inhibit HIV-1 infection of macrophages and activated peripheral blood mononuclear cells (PBMCs). Gardiquimod specifically activates TLR7 when used at concentrations below 10 μM[1][2].

<table>
<thead>
<tr>
<th>IC₅₀ &amp; Target</th>
<th>TLR7</th>
<th>TLR8</th>
<th>HIV-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Vitro</td>
<td>Gardiquimod (6-60 μM) significantly inhibits cDNA synthesis by HIV-1 reverse transcriptase[1].</td>
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In Vivo
Dendritic cells (DCs) in combination with Gardiquimod (1 mg/kg per mouse; i.p.; daily for 7 days) improves the anti-tumor effects of NK cells[2].

| Animal Model: | Male athymic nude mice (Balb-nu/nu, 5 weeks old) (bearing human HepG2 liver carcinoma xenografts)[2] |
| Dosage:       | 1 mg/kg per mouse |
| Administration: | i.p.; daily for 7 days |
| Result:       | Significantly suppressed the growth of human HepG2 liver carcinoma xenografts. |

REFERENCES


Caution: Product has not been fully validated for medical applications. For research use only.

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