PNU288034

Cat. No.: HY-101818
CAS No.: 383199-88-0
Molecular Formula: \( \text{C}_{16}\text{H}_{19}\text{F}_{2}\text{N}_{3}\text{O}_{5}\text{S} \)
Molecular Weight: 403.4
Target: Bacterial
Pathway: Anti-infection
Storage: Please store the product under the recommended conditions in the COA.

BIOLOGICAL ACTIVITY

<table>
<thead>
<tr>
<th>Description</th>
<th>PNU288034 is a potent oxazolidinone antibiotic.</th>
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<tr>
<td>In Vitro</td>
<td>In vitro studies conducted to characterize the transporters involved demonstrates PNU-288034 uptake by human organic anion transporter 3 (OAT3; ( K_m = 44 +/- 5 \mu M )) and human multidrug and toxin extrusion protein 1 (hMATE1; ( K_m = 340 +/- 55 \mu M ))(^1).</td>
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<tr>
<td>In Vivo</td>
<td>PNU-288034 is metabolically stable in liver microsomes across species, and unchanged drug is cleared in the urine by an apparent active renal secretion process in rat and monkey. Coadministration of PNU-288034 and the OAT3 inhibitor probenecid significantly increases PNU-288034 plasma area under the curve (170%) and reduces both plasma and renal clearance in monkey. Coadministration of PNU-288034 and cimetidine also reduces plasma clearance in rat to a rate comparable with probenecid coadministration(^1).</td>
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REFERENCES