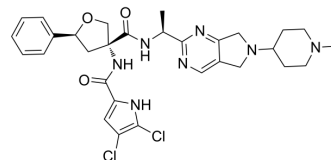


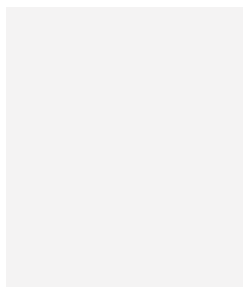
IL17A-IN-1

Cat. No.:	HY-158159
Molecular Formula:	C ₃₀ H ₃₅ Cl ₂ N ₇ O ₃
Molecular Weight:	612.55
Target:	Interleukin Related
Pathway:	Immunology/Inflammation
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	IL17A-IN-1 (compound 72) is an orally active Interleukin 17A inhibitor. IL17A-IN-1 can be used in the study of inflammatory and autoimmune diseases (plaque psoriasis, psoriatic arthritis, and ankylosing spondylitis, etc.), as well as cancer ^[1] .																							
In Vitro	IL17A-IN-1 inhibits Hela cells with an IC ₅₀ value of 0.005 μM ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.																							
In Vivo	<p>IL17A-IN-1 (10 mg/kg; p.o.; single dose) inhibits plasma CXCL1 secretion in hIL17A-induced mouse (IL17 receptor-containing mouse) CXCL1 PD model^[1]. (Subcutaneous injection of recombinant human IL17A into mice induces plasma CXCL1 secretion). MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>C57BL/6 mice (hIL17A-induced mouse CXCL1 PD model)^[1].</td> </tr> <tr> <td>Dosage:</td> <td>10 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Oral administration; single dose</td> </tr> <tr> <td>Result:</td> <td>Inhibited 53% of CXCL1 secretion in hIL17A-induced mouse CXCL1 PD model.</td> </tr> </table> <table border="1"> <tr> <td>Animal Model:</td> <td>Male Sprague-Dawley rats; 360-460 g^[1].</td> </tr> <tr> <td>Dosage:</td> <td>0.3 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Intravenous injection; single dose</td> </tr> <tr> <td>Result:</td> <td>Pharmacokinetic Parameters of IL17A-IN-1 in male Sprague-Dawley rats^[1].</td> </tr> <tr> <td></td> <td style="text-align: center;"> <table border="1"> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">IV (0.3 mg/kg)</td> </tr> <tr> <td style="text-align: center;">V_{ss} (L/kg)</td> <td style="text-align: center;">5.0</td> </tr> </table> </td> </tr> </table>		Animal Model:	C57BL/6 mice (hIL17A-induced mouse CXCL1 PD model) ^[1] .	Dosage:	10 mg/kg	Administration:	Oral administration; single dose	Result:	Inhibited 53% of CXCL1 secretion in hIL17A-induced mouse CXCL1 PD model.	Animal Model:	Male Sprague-Dawley rats; 360-460 g ^[1] .	Dosage:	0.3 mg/kg	Administration:	Intravenous injection; single dose	Result:	Pharmacokinetic Parameters of IL17A-IN-1 in male Sprague-Dawley rats ^[1] .		<table border="1"> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">IV (0.3 mg/kg)</td> </tr> <tr> <td style="text-align: center;">V_{ss} (L/kg)</td> <td style="text-align: center;">5.0</td> </tr> </table>		IV (0.3 mg/kg)	V _{ss} (L/kg)	5.0
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	$t_{1/2}$ (h)	3.6
	CLp/CLp,u (L/h/kg)	1.1/6.1

REFERENCES

[1]. Ramos AL, et al. Discovery of Small Molecule Interleukin 17A Inhibitors with Novel Binding Mode and Stoichiometry: Optimization of DNA-Encoded Chemical Library Hits to In Vivo Active Compounds. J Med Chem. 2024 Apr 4.

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

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