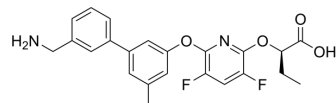


ZK824859

Cat. No.:	HY-114330
CAS No.:	2271122-53-1
Molecular Formula:	C ₂₃ H ₂₂ F ₂ N ₂ O ₄
Molecular Weight:	428.43
Target:	PAI-1; Ser/Thr Protease
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	ZK824859 is an oral available and selective urokinase plasminogen activator (uPA) inhibitor with IC ₅₀ s of 79 nM, 1580 nM and 1330 nM for human uPA, tPA, and plasmin, respectively ^[1] .								
IC₅₀ & Target	IC ₅₀ : 79 nM (human uPA), 1580 nM (human tPA), 1330 nM (human plasmin) ^[1] .								
In Vitro	ZK824859 is 5 fold less potent and has lost selectivity in mouse: uPA IC ₅₀ =410 nM; tPA IC ₅₀ =910 nM; plasmin IC ₅₀ =1600 nM compared to human IC ₅₀ values of 79 nM, 1580 nM and 1330 nM respectively ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
In Vivo	ZK824859 (50, 25 and 10 mg/kg; b.i.d.; 25 days) is used in a chronic mouse EAE model. ZK 824859 completely prevents the development of disease. However, two lower doses (25 and 10 mg/kg) have no effect on clinical scores ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
	<table border="1"> <tr> <td>Animal Model:</td> <td>Female SJL mice with chronic mouse EAE model^[1]</td> </tr> <tr> <td>Dosage:</td> <td>50, 25 and 10 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>B.i.d.; 25 days</td> </tr> <tr> <td>Result:</td> <td>Prevented the development of disease at 50 mg/kg completely. However, 25 and 10 mg/kg had no effect on clinical scores.</td> </tr> </table>	Animal Model:	Female SJL mice with chronic mouse EAE model ^[1]	Dosage:	50, 25 and 10 mg/kg	Administration:	B.i.d.; 25 days	Result:	Prevented the development of disease at 50 mg/kg completely. However, 25 and 10 mg/kg had no effect on clinical scores.
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REFERENCES

[1]. Islam I, et al. Discovery of selective urokinase plasminogen activator (uPA) inhibitors as a potential treatment for multiple sclerosis. *Bioorg Med Chem Lett*. 2018 Nov 1;28(20):3372-3375.

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

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