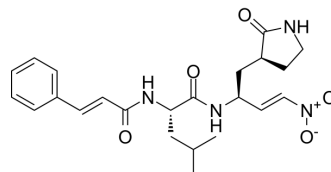


FGA145

Cat. No.:	HY-161244
Molecular Formula:	C ₂₃ H ₃₀ N ₄ O ₅
Molecular Weight:	442.51
Target:	SARS-CoV; Cathepsin; Virus Protease
Pathway:	Anti-infection; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	FGA145 is a dual, selective inhibitor for M ^{Pro} and human Cathepsin L, with K _i s of 3.71 μM, 9.82 μM and 53 nM, for Mal-M ^{Pro} , pET21-M ^{Pro} and Cathepsin L, respectively. FGA145 reveals a multitarget effects in the antiviral activity ^[1] .									
IC₅₀ & Target	cathepsin L 53 nM (K _i)	Cathepsin B 206 nM (K _i)								
In Vitro	<p>FGA145 reveals weak antiviral activity against SARS-CoV-2 with EC₅₀ of 11.7 μM with low cytotoxicity in Huh-7-ACE2 cells (CC₅₀ over 100 μM)^[1].</p> <p>FGA145 exhibits inhibitory properties towards cysteine proteases RhD, CRZ, Cat L and Cat B, with K_is of 1.63, 12.6, 53 and 206 nM^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Cytotoxicity Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>Huh-7-ACE2</td> </tr> <tr> <td>Concentration:</td> <td>0-100 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 h</td> </tr> <tr> <td>Result:</td> <td>Exhibited a CC₅₀ of over 100 μM.</td> </tr> </table>		Cell Line:	Huh-7-ACE2	Concentration:	0-100 μM	Incubation Time:	24 h	Result:	Exhibited a CC ₅₀ of over 100 μM.
Cell Line:	Huh-7-ACE2									
Concentration:	0-100 μM									
Incubation Time:	24 h									
Result:	Exhibited a CC ₅₀ of over 100 μM.									

REFERENCES

[1]. Medrano FJ, et al., Peptidyl nitroalkene inhibitors of main protease rationalized by computational and crystallographic investigations as antivirals against SARS-CoV-2. Commun Chem. 2024 Jan 18;7(1):15.

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

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