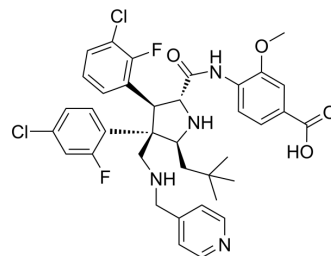


## YL93

Cat. No.:	HY-146806
CAS No.:	2771313-42-7
Molecular Formula:	C <sub>37</sub> H <sub>38</sub> Cl <sub>2</sub> F <sub>2</sub> N <sub>4</sub> O <sub>4</sub>
Molecular Weight:	711.62
Target:	MDM-2/p53
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



## BIOLOGICAL ACTIVITY

Description	YL93 is a dual inhibitors of MDM2/4 with K <sub>i</sub> values of 0.64 μM and 1.1 nM for MDM4 and MDM2, respectively. YL93 induces cell-cycle arrest and apoptosis. YL93 shows p53-dependent cell growth inhibition <sup>[1]</sup> .																
In Vitro	<p>YL93 shows anti-tumor activity and inhibits HCT-116 cell growth with an IC<sub>50</sub> value of 50.7 nM<sup>[1]</sup>.</p> <p>YL93 (0.078-2.5 μM; 24 h) increases the protein level of p53, p21, MDM2<sup>[1]</sup>.</p> <p>YL93 (0.02-2.5 μM; 24 h) arrests cell cycle at G1<sup>[1]</sup>.</p> <p>YL93 (6.25-25 μM; 48 h) increases apoptotic RKO cells<sup>[1]</sup>.</p> <p>YL93 (2.5 μM; 48 h) increases transcription of p53-targeted genes, MDM2, p21, and PUMA in MDM4-overexpressing cell lines H460, MCF-7, and U-2 OS<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Western Blot Analysis<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>HCT-116 cells</td> </tr> <tr> <td>Concentration:</td> <td>0.078125 μM, 0.15625 μM, 0.3125 μM, 0.625 μM, 1.25 μM, and 2.5 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 hours</td> </tr> <tr> <td>Result:</td> <td>Significantly increased the protein level of p53, p21, MDM2.</td> </tr> </table> <p>Cell Cycle Analysis<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>HCT-116 cells</td> </tr> <tr> <td>Concentration:</td> <td>0.02 μM, 0.1 μM, 0.5 μM, 2.5 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 hours</td> </tr> <tr> <td>Result:</td> <td>Arrested cell cycle at G1 phase.</td> </tr> </table>	Cell Line:	HCT-116 cells	Concentration:	0.078125 μM, 0.15625 μM, 0.3125 μM, 0.625 μM, 1.25 μM, and 2.5 μM	Incubation Time:	24 hours	Result:	Significantly increased the protein level of p53, p21, MDM2.	Cell Line:	HCT-116 cells	Concentration:	0.02 μM, 0.1 μM, 0.5 μM, 2.5 μM	Incubation Time:	24 hours	Result:	Arrested cell cycle at G1 phase.
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## REFERENCES

[1]. Zhang S, et al. Structure-Based Discovery of MDM2/4 Dual Inhibitors that Exert Antitumor Activities against MDM4-Overexpressing Cancer Cells. J Med Chem. 2022 Apr

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

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