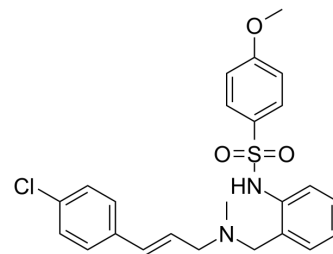


KN-92

Cat. No.:	HY-15517
CAS No.:	176708-42-2
Molecular Formula:	C ₂₄ H ₂₅ ClN ₂ O ₃ S
Molecular Weight:	456.98
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	KN-92 is an inactive derivative of KN-93, without CaM kinase inhibitory activity. KN-92 is intended to be used as a control compound in studies designed to elucidate the antagonist activities of KN-93. KN-93 is a cell-permeable, reversible and competitive CaMKII inhibitor ^{[1][2]} .								
In Vitro	<p>KN-93 (5-50 μM; 24 hours) inhibits LX-2 cell growth and KN-92 (5-50 μM; 24 hours) is ineffective in blocking cell growth^[2]. The analysis of cell cycle regulator expression reveals that KN-93 rather than KN-92 reduces the expression of p53 and p21^[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay^[2]</p> <table border="1"> <tr> <td>Cell Line:</td><td>Human hepatic stellate cells (LX-2)</td></tr> <tr> <td>Concentration:</td><td>5-50 μM</td></tr> <tr> <td>Incubation Time:</td><td>24 hours</td></tr> <tr> <td>Result:</td><td>Ineffective in blocking cell growth.</td></tr> </table>	Cell Line:	Human hepatic stellate cells (LX-2)	Concentration:	5-50 μM	Incubation Time:	24 hours	Result:	Ineffective in blocking cell growth.
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Concentration:	5-50 μM								
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Result:	Ineffective in blocking cell growth.								

CUSTOMER VALIDATION

- Cell Calcium. 2021 Oct 5;100:102483.
- J Mol Cell Cardiol. 2021 Nov 10;S0022-2828(21)00210-8.
- J Endocrinol. 2018 Mar;236(3):151-165.
- Nat Metab. 2020 Sep;2(9):918-933.

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REFERENCES

[1]. Smyth JT, et al. Inhibition of the inositol trisphosphate receptor of mouse eggs and A7r5 cells by KN-93 via a mechanism unrelated to Ca²⁺/calmodulin-dependent

protein kinase II antagonism. J Biol Chem. 2002;277(38):35061-35070.

[2]. An P, et al. KN-93, a specific inhibitor of CaMKII inhibits human hepatic stellate cell proliferation in vitro. World J Gastroenterol. 2007;13(9):1445-1448.

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

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