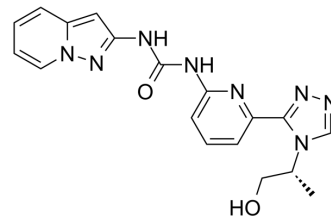


## ASK1-IN-3

<b>Cat. No.:</b>	HY-146729
<b>CAS No.:</b>	2426705-19-1
<b>Molecular Formula:</b>	C <sub>18</sub> H <sub>18</sub> N <sub>8</sub> O <sub>2</sub>
<b>Molecular Weight:</b>	378.39
<b>Target:</b>	MAP3K; Apoptosis
<b>Pathway:</b>	MAPK/ERK Pathway; Apoptosis
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	ASK1-IN-3 is a potent and selective ASK1 kinase inhibitor with IC <sub>50</sub> of 33.8 nM, as well as inhibits several cell cycle regulating kinases. ASK1-IN-3 has strong HepG2 cancer cells apoptosis induction and potent cell cycle arrest activities <sup>[1]</sup> .																
<b>IC<sub>50</sub> &amp; Target</b>	IC <sub>50</sub> : 33.8 nM (ASK1) <sup>[1]</sup>																
<b>In Vitro</b>	<p>ASK1-IN-3 (compound 14l) (10, 20 and 50 μM; 48 hours) induces PARP cleavage in a dose dependent manner, which indicates the induction of HepG2 cells apoptosis<sup>[1]</sup>.</p> <p>ASK1-IN-3 (1-16 μM; 24 hours) significantly arrests cycle progression at G1 phase<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p><b>Apoptosis Analysis</b></p> <table border="1"> <tr> <td>Cell Line:</td> <td>HepG2<sup>[1]</sup></td> </tr> <tr> <td>Concentration:</td> <td>10, 20 and 50 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 hours</td> </tr> <tr> <td>Result:</td> <td>Induced PARP cleavage in a dose dependent manner.</td> </tr> </table> <p><b>Cell Cycle Analysis</b></p> <table border="1"> <tr> <td>Cell Line:</td> <td>HepG2<sup>[1]</sup></td> </tr> <tr> <td>Concentration:</td> <td>1, 2, 4, 8, and 16 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 hours</td> </tr> <tr> <td>Result:</td> <td>Significantly arrested cycle progression at G1 phase.</td> </tr> </table>	Cell Line:	HepG2 <sup>[1]</sup>	Concentration:	10, 20 and 50 μM	Incubation Time:	48 hours	Result:	Induced PARP cleavage in a dose dependent manner.	Cell Line:	HepG2 <sup>[1]</sup>	Concentration:	1, 2, 4, 8, and 16 μM	Incubation Time:	24 hours	Result:	Significantly arrested cycle progression at G1 phase.
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### REFERENCES

[1]. Zhang S, Huang C, Lyu X, et al. Discovery of a 2-pyridinyl urea-containing compound YD57 as a potent inhibitor of apoptosis signal-regulating kinase 1 (ASK1). *Eur J Med Chem.* 2020;195:112277.

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

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