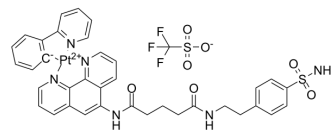


## hCAIX-IN-13

Cat. No.:	HY-151406
CAS No.:	2813334-66-4
Molecular Formula:	C <sub>37</sub> H <sub>33</sub> F <sub>3</sub> N <sub>6</sub> O <sub>7</sub> PtS <sub>2</sub>
Molecular Weight:	989.9
Target:	Apoptosis
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	hCAIX-IN-13 (Pt2) is an inhibitor of CAIX (arboic anhydrase IX) with an IC <sub>50</sub> value of 6.57 μM. hCAIX-IN-13 inhibits growth of cancer cells and induces cell apoptosis, it can be used for the research of cancer <sup>[1]</sup> .																
<b>IC<sub>50</sub> &amp; Target</b>	IC <sub>50</sub> : 6.57 μM (CAIX) <sup>[1]</sup>																
<b>In Vitro</b>	<p>hCAIX-IN-13 (10 and 20 μM; 24 h) effectively attenuates extracellular acidification through the inhibited activity of the cellular CAIX expression<sup>[1]</sup>.</p> <p>hCAIX-IN-13 (20 and 40 μM; 24 h) affects CAIX expression<sup>[1]</sup>.</p> <p>hCAIX-IN-13 (0-200 μM; 24 h) shows high cytotoxicity to cancer cell lines<sup>[1]</sup>.</p> <p>hCAIX-IN-13 (5-15 μM; 24 h) promotes the production of cellular ROS<sup>[1]</sup>.</p> <p>hCAIX-IN-13 (5-20 μM; 48 h) induces cell apoptosis<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>MDA-MB-231 cell line</td> </tr> <tr> <td>Concentration:</td> <td>20 and 40 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 hours</td> </tr> <tr> <td>Result:</td> <td>Dose-dependently inhibited the expression level of cellular CAIX.</td> </tr> </table> <p>Cell Cytotoxicity Assay<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>Hela, A549, MDA-MB 231, HLF and LO2 cell lines</td> </tr> <tr> <td>Concentration:</td> <td>0-200 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>48 hours</td> </tr> <tr> <td>Result:</td> <td>Showed cytotoxicity to Hela, A549, MDA-MB 231, normal cell HLF and normal cell LO2 with IC<sub>50</sub>s of 31.64, 30.45, 12.67, 21.64 and ∞100 μM, respectively.</td> </tr> </table> <p>Apoptosis Analysis<sup>[1]</sup></p>	Cell Line:	MDA-MB-231 cell line	Concentration:	20 and 40 μM	Incubation Time:	24 hours	Result:	Dose-dependently inhibited the expression level of cellular CAIX.	Cell Line:	Hela, A549, MDA-MB 231, HLF and LO2 cell lines	Concentration:	0-200 μM	Incubation Time:	48 hours	Result:	Showed cytotoxicity to Hela, A549, MDA-MB 231, normal cell HLF and normal cell LO2 with IC <sub>50</sub> s of 31.64, 30.45, 12.67, 21.64 and ∞100 μM, respectively.
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Cell Line:	MDA-MB-231 cell line
Concentration:	5-20 $\mu$ M
Incubation Time:	48 hours
Result:	Dose-dependently induced the early apoptotic stage.

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## REFERENCES

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[1]. Yang J, et al. NIR phosphorescent cyclometalated platinum (II) complexes with CAIX targeted and nuclear penetration as potent anticancer theragnostic agents. Eur J Med Chem. 2022 Aug 31;243:114702.

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

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