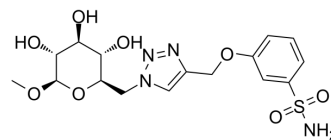


## CA IX-IN-1

Cat. No.:	HY-149011
Molecular Formula:	C <sub>16</sub> H <sub>22</sub> N <sub>4</sub> O <sub>8</sub> S
Molecular Weight:	430.43
Target:	Carbonic Anhydrase
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



## BIOLOGICAL ACTIVITY

<b>Description</b>	CA IX-IN-1 (compound 12g) is an effective and selective inhibitor of hCA IX with IC <sub>50</sub> value of 7 nM. CA IX-IN-1 exhibits antitumor activity <sup>[1]</sup> .																
<b>In Vitro</b>	<p>CA IX-IN-1 (compound 12g) displays effective inhibition against hCA I, hCA II and hCA IX with IC<sub>50</sub> values of 4, 0.018, 0.007 μM, respectively<sup>[1]</sup>.</p> <p>CA IX-IN-1 (compound 12g) (0.1 μM, 72 hours; HT-29 and MDA-MB-231 cells) exerts the potent antitumor activities against human cancer cell lines<sup>[1]</sup>.</p> <p>CA IX-IN-1 (compound 12g) (0-1 mM, 48 hours; HT-29 and MDA-MB-231 cells) induces highly expression level and enzyme activity of HCA IX in tumor cells with enhance the acidification of extracellular pH<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Cytotoxicity Assay<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>HT-29 (colon carcinoma cells) and MDA-MB-231 (breast cancer cells)</td> </tr> <tr> <td>Concentration:</td> <td>0.1 mM</td> </tr> <tr> <td>Incubation Time:</td> <td>72 hours</td> </tr> <tr> <td>Result:</td> <td>Revealed antitumor activity against HT-29 and MDA-MB-231 (IC<sub>50</sub> = 32 and 31 μM respectively).</td> </tr> </table> <p>Cell Cytotoxicity Assay<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>MDA-MB-231 (breast cancer cells)</td> </tr> <tr> <td>Concentration:</td> <td>0.1 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>72 hours</td> </tr> <tr> <td>Result:</td> <td>Decreased (20–35%) of IC<sub>50</sub> values were detected compared with that obtained for DOX alone.</td> </tr> </table>	Cell Line:	HT-29 (colon carcinoma cells) and MDA-MB-231 (breast cancer cells)	Concentration:	0.1 mM	Incubation Time:	72 hours	Result:	Revealed antitumor activity against HT-29 and MDA-MB-231 (IC <sub>50</sub> = 32 and 31 μM respectively).	Cell Line:	MDA-MB-231 (breast cancer cells)	Concentration:	0.1 μM	Incubation Time:	72 hours	Result:	Decreased (20–35%) of IC <sub>50</sub> values were detected compared with that obtained for DOX alone.
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## REFERENCES

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA