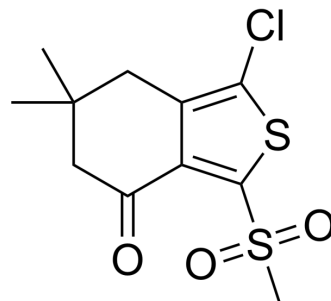


AI-3

Cat. No.:	HY-107736
CAS No.:	882288-28-0
Molecular Formula:	C ₁₁ H ₁₃ ClO ₃ S ₂
Molecular Weight:	292.8
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	AI-3 is a potent ARE (antioxidant response element) activator. AI-3 increases the NQO1 at the transcript levels and protein expression levels. AI-3 has the potential for the research of oxidative stress related diseases ^[1] .								
IC₅₀ & Target	ARE ^[1]								
In Vitro	<p>AI-3 (0.1, 0.3, 1, 3.2, 10, 32 μM; 12, 24 h) increases the NQO1 at the transcript levels and protein expression levels in a dose-dependent manner in IMR-32 cells^[1].</p> <p>AI-3 (10 μM; 2-24 h) induces GSH synthesis starting from 4 h up to 24 h^[1].</p> <p>AI-3 requires Nrf2 and PI3K for its bioactivities in IMR-32 cells^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Western Blot Analysis^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>IMR-32 cells</td> </tr> <tr> <td>Concentration:</td> <td>0.1, 0.3, 1, 3.2, 10, 32 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 h</td> </tr> <tr> <td>Result:</td> <td>Induced NQO1 protein expression starting from 0.3 μM.</td> </tr> </table>	Cell Line:	IMR-32 cells	Concentration:	0.1, 0.3, 1, 3.2, 10, 32 μM	Incubation Time:	24 h	Result:	Induced NQO1 protein expression starting from 0.3 μM.
Cell Line:	IMR-32 cells								
Concentration:	0.1, 0.3, 1, 3.2, 10, 32 μM								
Incubation Time:	24 h								
Result:	Induced NQO1 protein expression starting from 0.3 μM.								

REFERENCES

[1]. Wang R, et al. In vitro and in vivo characterization of a tunable dual-reactivity probe of the Nrf2-ARE pathway. ACS Chem Biol. 2013 Aug 16;8(8):1764-74.

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

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