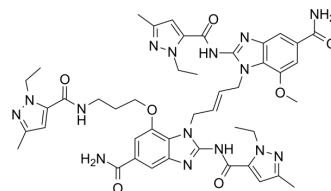


STING agonist-13

Cat. No.:	HY-143321
CAS No.:	2816929-48-1
Molecular Formula:	C ₄₅ H ₅₃ N ₁₅ O ₇
Molecular Weight:	916
Target:	STING
Pathway:	Immunology/Inflammation
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	STING agonist-13 is a stimulator of interferon genes (STING) agonist, for cancer immunity via STING-mediated immune activation. STING agonist-13 can stimulate STING downstream signaling and promoting type I interferon immune responses. STING agonist-13 significantly decreases tumor volume and shows immunological memory-derived cancer inhibition ^[1] .								
IC₅₀ & Target	EC ₅₀ : 7.471 nM (PBMCs), 2.442 nM (RAW264.7) ^[1]								
In Vitro	<p>STING agonist-13 (compound 4c) induces the secretion of IFN-β with an EC₅₀ of 7.471 nM in human primary PBMCs cells^[1]. STING agonist-13 (2 μM; 24 hours) induces IP-10 with an EC₅₀ of 2.442 nM and other proinflammatory cytokines such as IL-6 and TNF-α release in RAW264.7 cells^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>PBMCs, RAW264.7</td> </tr> <tr> <td>Concentration:</td> <td>2 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 hours</td> </tr> <tr> <td>Result:</td> <td>Showed broad reactivity in PBMCs and RAW264.7 cells.</td> </tr> </table>	Cell Line:	PBMCs, RAW264.7	Concentration:	2 μM	Incubation Time:	24 hours	Result:	Showed broad reactivity in PBMCs and RAW264.7 cells.
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Concentration:	2 μM								
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Result:	Showed broad reactivity in PBMCs and RAW264.7 cells.								
In Vivo	<p>STING agonist-13 (compound 4c; 1.5 mg/kg; i.v.; once a day for 8 days) suppresses tumor growth and can prevent tumor recurrence by immune activation^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>8 week-old female BALB/c mice(CT26 tumor mouse models)^[1]</td> </tr> <tr> <td>Dosage:</td> <td>1.5 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Intravenous injection; once a day for 8 days.</td> </tr> <tr> <td>Result:</td> <td>Showed activity of cancer immunity via STING-mediated immune activation.</td> </tr> </table>	Animal Model:	8 week-old female BALB/c mice(CT26 tumor mouse models) ^[1]	Dosage:	1.5 mg/kg	Administration:	Intravenous injection; once a day for 8 days.	Result:	Showed activity of cancer immunity via STING-mediated immune activation.
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Result:	Showed activity of cancer immunity via STING-mediated immune activation.								

REFERENCES

[1]. Jeon MJ, L, et al. Development of Potent Immune Modulators Targeting Stimulator of Interferon Genes Receptor. J Med Chem. 2022 Apr 14;65(7):5407-5432.

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

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