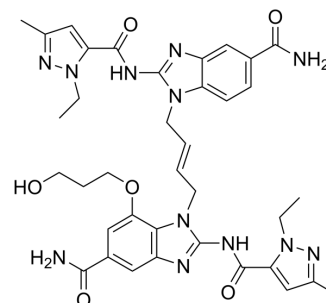


## STING agonist-3

<b>Cat. No.:</b>	HY-103665		
<b>CAS No.:</b>	2138299-29-1		
<b>Molecular Formula:</b>	C <sub>37</sub> H <sub>42</sub> N <sub>12</sub> O <sub>6</sub>		
<b>Molecular Weight:</b>	750.81		
<b>Target:</b>	STING		
<b>Pathway:</b>	Immunology/Inflammation		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 41.67 mg/mL (55.50 mM; Need ultrasonic)					
		Solvent Concentration	Mass	1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM		1.3319 mL	6.6595 mL	13.3189 mL
		5 mM		0.2664 mL	1.3319 mL	2.6638 mL
10 mM			0.1332 mL	0.6659 mL	1.3319 mL	
Please refer to the solubility information to select the appropriate solvent.						
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 2.08 mg/mL (2.77 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: 2.08 mg/mL (2.77 mM); Suspended solution; Need ultrasonic</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.08 mg/mL (2.77 mM); Clear solution</li> </ol>					

### BIOLOGICAL ACTIVITY

<b>Description</b>	STING agonist-3, extracted from patent WO2017175147A1 (example 10), is a selective and non-nucleotide small-molecule STING agonist with a pEC <sub>50</sub> and pIC <sub>50</sub> of 7.5 and 9.5, respectively. STING agonist-3 has durable anti-tumor effect and tremendous potential to improve treatment of cancer <sup>[1]</sup> .
<b>In Vitro</b>	STING agonist-3 exhibits a pEC <sub>50</sub> value of 7.5 in activation of STING in cells, this assay is determined using a luciferase reporter assay in human embryonic kidney cells (HEK293T) co-transfected with plasmids expressing STING and the enzyme firefly luciferase driven by the interferon stimulated response element promoter <sup>[1]</sup> .

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?STING agonist-3 exhibits a pIC<sub>50</sub> value of 9.5 in FRET assay. This is a competition binding assay which aims to determine the binding potency of molecules to the C-terminal Domain (CTD) of human STING<sup>[1]</sup>.  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## CUSTOMER VALIDATION

- Nature. 2022 Oct;610(7933):761-767.
- Signal Transduct Target Ther. 2023 Feb 24;8(1):79.
- Signal Transduct Target Ther. 2021 Mar 15;6(1):123.
- J Clin Invest. 2024 Mar 19:e176748.
- Clin Transl Med. 2020 Nov;10(7):e228.

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## REFERENCES

[1]. Adam Kenneth, et al. Heterocyclic amides useful as protein modulators, patent WO2017175147A1

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

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