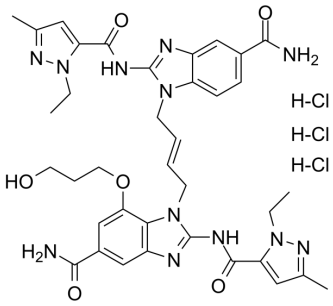
STING agonist-3 trihydrochloride

Cat. No.:	HY-103665A
Molecular Formula:	$C_{37}H_{45}Cl_3N_{12}O_6$
Molecular Weight:	860.19
Target:	STING
Pathway:	Immunology/Inflammation
Storage:	4°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 20 mg/mL (23.25 mM; ultrasonic and warming and heat to 80°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.1625 mL	5.8127 mL	11.6253 mL
	5 mM	0.2325 mL	1.1625 mL	2.3251 mL
	10 mM	0.1163 mL	0.5813 mL	1.1625 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: 2 mg/mL (2.33 mM); Clear solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 2 mg/mL (2.33 mM); Clear solution; Need ultrasonic
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: 2 mg/mL (2.33 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

STING agonist-3 trihydrochloride, extracted from patent WO2017175147A1 (example 10), is a selective and non-nucleotide small-molecule STING agonist with a pEC_{50} and pEC_{50} of 7.5 and 9.5, respectively. STING agonist-3 trihydrochloride has durable anti-tumor effect and tremendous potential to improve treatment of cancer[1].

IC_{50} & Target

STING[1]

In Vitro

STING agonist-3 trihydrochloride exhibits a pEC_{50} 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[1].

STING agonist-3 trihydrochloride exhibits a pIC_{50} 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[1].

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.
- Clin Transl Med. 2020 Nov;10(7):e228.
- Cancer Immunol Res. 2023 Mar 15;CIR-22-0483.

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REFERENCES

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

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