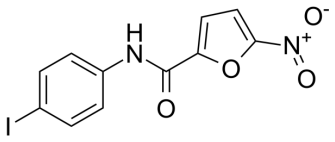
C-176

Cat. No.:	HY-112906
CAS No.:	314054-00-7
Molecular Formula:	$C_{11}H_7IN_2O_4$
Molecular Weight:	358.09
Target:	STING
Pathway:	Immunology/Inflammation
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 62.5 mg/mL (174.54 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.7926 mL	13.9630 mL	27.9259 mL
	5 mM	0.5585 mL	2.7926 mL	5.5852 mL
	10 mM	0.2793 mL	1.3963 mL	2.7926 mL

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

BIOLOGICAL ACTIVITY

Description

C-176 is a strong and covalent mouse STING inhibitor[1].

IC_{50} & Target

STING[1].

In Vitro

C-176 strongly reduces STING-mediated, but not RIG-I- or TBK1-mediated, IFNβ reporter activity. Pretreatment with C-176 markedly reduce the CMA-mediated induction of serum levels of type I IFNs and IL-6[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

C-176 (750/375 nmol C-176 per mouse in 200 μL corn oil) significantly reduces the CMA-mediated induction of serum levels of type I IFNs and IL-6., without significant toxicity[1].

C-176 results in a significant reduction in serum levels of type I IFNs and in a strong suppression of inflammatory parameters in the heart, with no evident signs of overt toxicity $Trex1^{-/-}$ mice[1].

C-176 demonstrates marked amelioration of various signs of systemic inflammation in $Trex1^{-/-}$ mice[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	WT type mice.
Dosage:	750/375 nmol C-176 per mouse in 200 μL corn oil (~1.34/0.67 mg/mL).
Administration:	Intraperitoneally, once.
Result:	Significantly reduced Serum levels of type I IFNs and IL-6.

CUSTOMER VALIDATION

- Adv Sci (Weinh). 2021 Jan 6;8(5):2002738.
- Neuron. 2022 Nov 4;S0896-6273(22)00961-8.
- J Clin Invest. 2021 Oct 15;131(20):e136329.
- Cancer Res. 2021 Apr 5;canres.3738.2020.
- Cancer Res. 2021 Feb 15;canres.2370.2020.

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REFERENCES

[1]. Haag SM, et al. Targeting STING with covalent small-molecule inhibitors. Nature. 2018 Jul;559(7713):269-273.

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