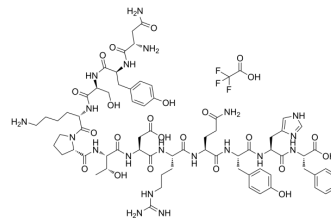


(D)-PPA 1 TFA

Cat. No.:	HY-P4072A
Molecular Formula:	C ₇₂ H ₉₉ F ₃ N ₂₀ O ₂₃
Molecular Weight:	1669.67
Sequence:	D-{Asn-Tyr-Ser-Lys-Pro-Thr-Asp-Arg-Gln-Tyr-His-Phe}
Sequence Shortening:	D-{NYSKPTDRQYHF}
Target:	PD-1/PD-L1
Pathway:	Immunology/Inflammation
Storage:	Sealed storage, away from moisture and light, under nitrogen
	Powder -80°C 2 years
	-20°C 1 year



* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light, under nitrogen)

SOLVENT & SOLUBILITY

In Vitro

H₂O : 100 mg/mL (59.89 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	0.5989 mL	2.9946 mL	5.9892 mL
	5 mM	0.1198 mL	0.5989 mL	1.1978 mL
	10 mM	0.0599 mL	0.2995 mL	0.5989 mL

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

BIOLOGICAL ACTIVITY

Description

(D)-PPA 1 TFA is a hydrolysisresistant d-peptide antagonist. (D)-PPA 1 TFA serves as a potent PD-1/PD-L1 inhibitor. (D)-PPA 1 TFA binds to PD-1 with the affinity of 0.51 μM with in vitro and in vivo efficacy^[1].

In Vitro

(D)-PPA 1 TFA (0.2 mg/mL, 1.0 mg/mL) blocks the interaction between PD-1/PD-L1 at 1.0 mg/mL^[1].
 (D)-PPA 1 TFA (3.125-100 μM; 24 h, 48 h) doesn't kill tumor cells directly with no affect on CT26 cells growth^[1].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

(D)-PPA 1 TFA (2 mg/kg; s.c. or i.p.; once daily for 7 d) inhibits CT26 tumor growth in vivo in mice^[1].
 (D)-PPA 1 TFA (40 μg/mouse in 200 μL; i.v.; single dose) has the ability to target to tumor tissue in CT26-tumor-bearing mice^[1].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Chang HN, et al. Blocking of the PD-1/PD-L1 Interaction by a D-Peptide Antagonist for Cancer Immunotherapy. *Angew Chem Int Ed Engl.* 2015 Sep 28;54(40):11760-4.

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

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