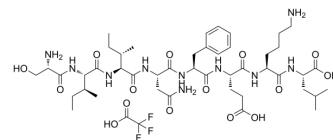


OVA Peptide(257-264) TFA

Cat. No.:	HY-P1489A
CAS No.:	1262751-08-5
Molecular Formula:	C ₄₇ H ₇₅ F ₃ N ₁₀ O ₁₅
Molecular Weight:	1077.15
Sequence:	Ser-Ile-Ile-Asn-Phe-Glu-Lys-Leu
Sequence Shortening:	SIINFEKL
Target:	Others
Pathway:	Others
Storage:	Sealed storage, away from moisture
	Powder -80°C 2 years
	-20°C 1 year

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



SOLVENT & SOLUBILITY

In Vitro	DMSO : 125 mg/mL (116.05 mM; Need ultrasonic)					
	H ₂ O : 50 mg/mL (46.42 mM; Need ultrasonic)					
	Preparing Stock Solutions	<div>Solvent Concentration</div>	Mass	1 mg	5 mg	10 mg
		1 mM		0.9284 mL	4.6419 mL	9.2838 mL
		5 mM		0.1857 mL	0.9284 mL	1.8568 mL
		10 mM		0.0928 mL	0.4642 mL	0.9284 mL
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (1.93 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	OVA Peptide(257-264) TFA is a class I (Kb)-restricted peptide epitope of OVA, an octameric peptide can be from ovalbumin presented by the class I MHC molecule, H-2Kb.
In Vitro	TAP1-I- and C57BL/6 macrophages may process Crl-OVA and full-length OVA in different cellular compartments and that the protein context of the OVA Peptide(257-264) epitope influences the extent of TAP-independent processing for MHC class I presentation. OVA Peptide(257-264) epitope is presented with a differential dependence on the TAP transporter depending on the protein context of the OVA epitope: OVA Peptide(257-264) contained within the MBPCrl-OVA or Crl-OVA bacterial fusion proteins is presented with little dependence on the TAP transporter, while OVA Peptide(257-264) contained within full-length ovalbumin is largely dependent on the TAP transporter, regardless of whether recombinant OVA is expressed in

bacteria or the native protein is coupled to polystyrene beads^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

PROTOCOL

Cell Assay

TAP1^{-/-} or C57BL/6 macrophages are co-incubated with either bacteria or polystyrene beads containing the 257-264 epitope from ovalbumin [OVA Peptide(257-264)], which binds the mouse class I molecule Kb. The source of the OVA(257-264) epitope is either the CrI-OVA(257-264) (CrI-OVA) fusion protein, the maltose binding protein (MBP)-CrI-OVA fusion protein, native OVA or bacterial recombinant OVA (rOVA); CrI-OVA, MBP-CrI-OVA and rOVA are each expressed in bacteria, and CrI-OVA and MBP-CrI-OVA purified from bacterial lysates and native egg OVA are coated onto polystyrene beads^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- OncoImmunology. 2022 Feb 9;11(1):2034257.
- bioRxiv. 2023 Jan 31.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Wick MJ, et al. Major histocompatibility complex class I presentation of ovalbumin peptide 257-264 from exogenous sources: protein context influences the degree of TAP-independent presentation. Eur J Immunol. 1996 Nov;26(11):2790-9.

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

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