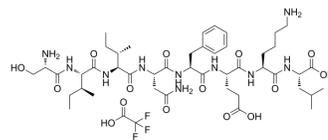


## OVA Peptide(257-264) TFA

<b>Cat. No.:</b>	HY-P1489A
<b>CAS No.:</b>	1262751-08-5
<b>Molecular Formula:</b>	C <sub>47</sub> H <sub>75</sub> F <sub>3</sub> N <sub>10</sub> O <sub>15</sub>
<b>Molecular Weight:</b>	1077.15
<b>Sequence:</b>	Ser-Ile-Ile-Asn-Phe-Glu-Lys-Leu
<b>Sequence Shortening:</b>	SIINFEKL
<b>Target:</b>	Others
<b>Pathway:</b>	Others
<b>Storage:</b>	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

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

### BIOLOGICAL ACTIVITY

<b>Description</b>	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.
<b>In Vitro</b>	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<sup>[1]</sup>.  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## PROTOCOL

### Cell Assay

TAP1<sup>-/-</sup> 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<sup>[1]</sup>.  
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](http://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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