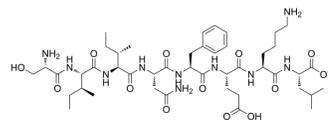


## OVA Peptide(257-264)

<b>Cat. No.:</b>	HY-P1489
<b>CAS No.:</b>	138831-86-4
<b>Molecular Formula:</b>	C <sub>45</sub> H <sub>74</sub> N <sub>10</sub> O <sub>13</sub>
<b>Molecular Weight:</b>	963.13
<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

#### In Vitro

0.1 %TFA : 1.83 mg/mL (1.90 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.0383 mL	5.1914 mL	10.3828 mL
	5 mM	---	---	---
	10 mM	---	---	---

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

### BIOLOGICAL ACTIVITY

#### Description

OVA Peptide(257-264) 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 CrI-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 MBPCrI-OVA or CrI-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.

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## 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

- Mol Cell. 2024 Feb 9;S1097-2765(24)00091-1.
- 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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