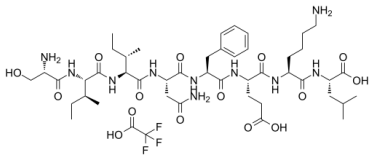
Data Sheet

Product Name:	OVA Peptide (257-264) (TFA)
Cat. No.:	CS-0089371
CAS No.:	1262751-08-5
Molecular Formula:	C47H75F3N10O15
Molecular Weight:	1077.15
Target:	Others
Pathway:	Others
Solubility:	H2O : 20 mg/mL (18.57 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

OVA Peptide (257-264) TFA is a class I (Kb)-restricted peptide epitope of OVA, an octameric peptide 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].

PROTOCOL (Extracted from published papers and Only for reference)

Cell Assay: TAPI$^{-/-}$ 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 Crl-OVA(257-264) (Crl-OVA) fusion protein, the maltose binding protein (MBP)-Crl-OVA fusion protein, native OVA or bacterial recombinant OVA (rOVA); Crl-OVA, MBP-Crl-OVA and rOVA are each expressed in bacteria, and Crl-OVA and MBP-Crl-OVA purified from bacterial lysates and native egg OVA are coated onto polystyrene beads[1].

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.

CAIndexNames:

L-Seryl-L-isoleucyl-L-isoleucyl-L-asparaginyl-L-phenylalanyl-L-α-glutamyl-L-lysyl-L-leucine trifluoroacetate

SMILES:

O=C(N[C@@H]([C@@H](C)CC)C(N[C@@H]([C@@H](C)CC)C(N[C@@H](CC(N)=O)C(N[C@@H](CC1=CC=CC=C1)C(N[C@@H](CCC(O)=O)C(N[C@@H](CCCCN)C(N[C@@H](CC(C)C)C(O)=O)=O)=O)=O)=O)=O)[C@H](CO)N.OC(C(F)(F)F)=O

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

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