



## Product Data Sheet

**Product Name:** OVA (323-339)  
**Catalog Number:** AS-27024 (1 mg) Lot Number: See label on vial  
AS-27025 (5 mg)

**Sequence:** H-Ile-Ser-Gln-Ala-Val-His-Ala-Ala-His-Ala-Glu-Ile-Asn-Glu-Ala-Gly-Arg-OH (3-letter code)  
ISQAVHAAHAEINEAGR (1-letter code)

**Molecular Weight:** 1773.9

**% Peak Area by HPLC:** ≥ 95

**Appearance:** Lyophilized white powder

**Peptide Reconstitution:** Use distilled or higher quality water. Add water directly to the lyophilized peptide powder to obtain a final concentration of approximately 0.5 mg/mL to 1mg/mL or less. Gently vortex to mix. For peptides that have poor solubility in the suggested solvent, brief sonication may increase solubility in some cases.

**Storage:** Peptide is shipped at ambient temperature. Upon receipt, store lyophilized powder at –20°C or lower. Reconstituted peptide should be aliquoted into several freezer vials and stored at –20°C or lower. Do not freeze thaw.

**Description:** An H-2b-restricted OVA class II epitope. Oran, A. and H. Robinson, *J. Immunol.* **171**, 1999 (2003); Palmiter, RD. et al. *Proc Natl Acad Sci* **75**, 94 (1978).

**Additional Information:** Listed below are relevant information that may provide a guideline on how to use this product. End users will have to adapt to their own specific applications.

Isolated macrophages and DC were pulsed with 10 µg/ml OVA peptide 323-339 (27024, AnaSpec, San Jose, CA, USA) for 60 min at 37°C. Pulsed cells were washed in supplemented DMEM. OVA-specific CD4 T cells were isolated from the spleens- [Siracusa, MC. et al. \*J Leukocyte Biol\* \*\*84\*\*, 1422 \(2008\).](#)

A total of 50,000 naïve OT-II CD4 T cells were cultured in 96-well plates with 30,000 purified splenic DCs. Replicate cultures were in RPMI medium 1640 supplemented with 10% FBS, 10 mM Hepes, 50 µM 2-mercaptoethanol, penicillin/streptomycin/l-glutamine, 50 units/ml human IL-2 (PeproTech), 250 ng/ml synthetic OVA (323–339) peptide (Anaspec), and the indicated concentration of human recombinant TGF-β1 (R&D Systems)- [Wang, L. et al. \*PNAS\* \*\*105\*\*, 9331 \(2008\).](#)

Groups of eight mice were immunized s.c. in multiple sites of both flanks with 50 µg of OVA peptide (Anaspec) in CFA or adsorbed to Al(OH)<sub>3</sub> (IgE). Each mouse adoptively receiving T cells was boosted s.c. 14 days later with 50 µg of OVA in IFA (secondary for all isotypes). After 4 days for OVAAl(OH)<sub>3</sub>, and 14 and 21 days for OVA-Freund's adjuvant, plasma samples were isolated from retroorbital heparinized venous blood- [Huang, M-C. et al. \*J Immunol\* \*\*178\*\*, 6806 \(2007\).](#)

A total of 2.5 x 10<sup>4</sup> CD4+ T cells from spleen and lymph nodes of OT-II mice were cocultured in a 96-well U-bottom plate containing irradiated (3 Gy) transduced DC pulsed with 6.7 µg/ml OVA 323–339 peptide (AnaSpec)- [Garrod, KR. et al. \*J Immunol\* \*\*177\*\*, 863 \(2006\).](#)

Published Citations:

[Lau-Kilby, A. et al. \*PNAS\* 10.1073/pnas.1009738108 \(2011\).](#)  
[Durgan, K. et al. \*Cancer Immunol Immunotherapy\* 10.1007/s00262-010-0963-5 \(2010\).](#)  
[Falcon, C. et al. \*Vet Immunol Immunopathol\* 10.1016/j.vetimm.2010.04.007 \(2010\).](#)  
[Garrod, KR. et al. \*J Immunol\* \*\*184\*\*, 2329 \(2010\).](#)  
[Giordano, D. et al. \*J Leukocyte Biol\* 10.1189/jlb.0610329 \(2010\).](#)  
[Harada, Y. et al. \*JEM\* 10.1084/jem.20100004 \(2010\).](#)  
[Toubai, T. et al. \*Blood\* \*\*115\*\*, 724 \(2010\).](#)  
[Guarda, G. et al. \*Nature\* \*\*460\*\*, 269 \(2009\).](#)  
[Liu, J. et al. \*J Virol\* \*\*83\*\*, 4934 \(2009\).](#)  
[Ocana-Morgner, C. et al. \*Blood\* \*\*113\*\*, 1474 \(2009\).](#)  
[Ozao-Choy, J. et al. \*Cancer Res\* \*\*69\*\*, 2514 \(2009\).](#)  
[Kang, Y. et al. \*J Immunol\* \*\*180\*\*, 5172 \(2008\).](#)  
[Siracusa, MC. et al. \*J Leukocyte Biol\* \*\*84\*\*, 1422 \(2008\).](#)  
[Wang, L. et al. \*PNAS\* \*\*105\*\*, 9331 \(2008\).](#)  
[Huang, M-C. et al. \*J Immunol\* \*\*178\*\*, 6806 \(2007\).](#)  
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[Kwa, S-F. et al. \(2006\). \*J Immunol\* \*\*176\*\*, 7533 \(2006\).](#)  
[Stachowiak, AN. et al. \*J Immunol\* \*\*177\*\*, 2340 \(2006\).](#)  
[Baekkevold, ES. et al. \*J Exp Med\* \*\*201\*\*, 1045 \(2005\).](#)  
[Seroogy, CM. et al. \*J Immunol\* \*\*173\*\*, 79 \(2004\).](#)  
[Bard, F. et al. \*PNAS\* \*\*100\*\*, 2023 \(2003\).](#)  
[Dorsam, G. et al. \*J Immunol\* \*\*171\*\*, 3500 \(2003\).](#)

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