



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)₃ (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)₃, 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 10⁴ 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 \(2007\).](#)

[Garrod, KR. et al. *J Immunol* **177**, 863 \(2006\).](#)

[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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