

# EndoFit™ OVA

Chicken egg albumin; for *in vivo* use

Catalog code: vac-pova, vac-pova-100

<https://www.invivogen.com/endofit-ovalbumin>

For research use only

Version 23L04-NJ

## PRODUCT INFORMATION

### Contents:

EndoFit™ OVA is provided lyophilized and is available in 2 quantities:

- 10 mg sterile EndoFit™ OVA: vac-pova
- 4 x 25 mg sterile EndoFit™ OVA: vac-pova-100

EndoFit™ OVA does not contain salts.

- sterile endotoxin-free physiological water (NaCl 0.9%); 10 ml with #vac-pova and 2 x 10 ml with #vac-pova-100

### Storage and stability

- EndoFit™ OVA is shipped at room temperature. Upon receipt, it should be stored at 4°C.
- Upon resuspension, prepare aliquots of product and store at -20°C. Resuspended product is stable for 6 months when properly stored. Avoid repeated freeze-thaw cycles.

### Notes:

- It is recommended to quick-freeze diluted OVA.
- During storage or resuspension, fibrous aggregates of ovalbumin can occur. These do not impact the product quality and usually represent a small fraction of the total product (i.e. less than 5%).

### Quality Control

- Purity: 98% minimum (SDS-PAGE)
- EndoFit™ OVA is prepared under strict aseptic conditions. It is tested for sterility and the presence of endotoxins. EndoFit™ OVA is guaranteed sterile and its endotoxin level is <1 EU/mg (measurement by kinetic chromogenic LAL assay).
- The absence of bacterial contamination (e.g. lipoproteins and endotoxins) has been confirmed using HEK-Blue™ TLR2 and HEK-Blue™ TLR4 cells.

## DESCRIPTION

OVA (also known as ovalbumin or albumin) is a key reference protein for immunization. It is the most abundant protein in chicken egg whites. OVA is a glycoprotein that is sufficiently large and complex to be mildly immunogenic. Consequently, it is widely used as an antigen for immunization experiments<sup>1-3</sup>. Furthermore, OVA can be used as a carrier protein for conjugation to haptens<sup>4</sup> and other antigens to make them more immunogenic. For accurate and reliable experimental results, the quality of OVA is crucial. However, commercially available OVA is often contaminated with endotoxins which alter the results obtained *in vivo*<sup>5</sup>. EndoFit™ OVA has endotoxin levels <1 EU/mg and is guaranteed sterile.

1. Lipford G.B. *et al.*, 1993. Primary *in vivo* responses to ovalbumin. Probing the predictive value of the Kb binding motif. *J Immunol.* 150(4):1212-1222. 2. Newman M.J. *et al.*, 1992. Saponin adjuvant induction of ovalbumin-specific CD8+ cytotoxic T lymphocyte responses. *J Immunol.* 148(8):2357-2362. 3. Vaz E.M. *et al.*, 1971. Persistent formation of reagins in mice injected with low doses of ovalbumin. *Immunology.* 21(1):11-15. 4. Slütter B. *et al.*, 2010. Conjugation of ovalbumin to N-trimethyl chitosan improves immunogenicity of the antigen. *Journal of Controlled Release* 143(2):207-14. 5. Watanabe J. *et al.*, 2003. Endotoxin contamination of ovalbumin suppresses murine immunologic responses and development of airway hyperreactivity. *J Biol Chem.* 278(43):42361-8.

## CHEMICAL PROPERTIES

CAS number: 9006-59-1

Molecular weight: ~ 45 kDa

Solubility: 10 mg/ml in physiological water

## METHODS

### Preparation of stock solution (10 mg/ml)

1. Allow sterile endotoxin-free physiological water to reach room temperature before use.
2. Resuspend EndoFit™ OVA with sterile endotoxin-free physiological water (provided).
  - Add 1 ml to 10 mg vial of EndoFit™ OVA
  - Add 2.5 ml to 25 mg vial of EndoFit™ OVA
3. Mix the solution by pipetting up and down. The solution may appear slightly hazy or contain fibrous aggregates.  
*Note: This does not impact product quality.*
4. Filter the stock solution of EndoFit™ OVA using a sterile 0.2 µm (pore size) filter to remove insoluble material.
5. Further dilutions can be made with sterile saline water.

## APPLICATIONS

EndoFit™ OVA is designed for immunization of laboratory animals.

Other applications have not been tested.

## RELATED PRODUCTS

Product	Description	Cat.Code
<b>Alum and Emulsions</b>		
AddaVax™	Squalene-Oil-in-water	vac-adx-10
Alhydrogel® adjuvant 2%	Aluminium hydroxide gel	vac-alu-250
CFA	Complete Freund's adjuvant	vac-cfa-10
<b>PRR Ligands</b>		
2'3'-cGAMP VacciGrade™	STING agonist	vac-nacda2r
Flagellin FLIC VacciGrade™	TLR5 agonist	vac-fla
MPLA-SM VacciGrade™	TLR4 agonist	vac-mpla
Pam3CSK4 VacciGrade™	TLR2 agonist	vac-pms
Poly(I:C) VacciGrade™	TLR3 agonist	vac-pic
R848 VacciGrade™	TLR7/8 agonist	vac-r848
<b>OVA Antigens</b>		
OVA protein	Protein	vac-stova
OVA 257-264	Peptide	vac-sin
OVA 323-339	peptide	vac-isq

### TECHNICAL SUPPORT

InvivoGen USA (Toll-Free): 888-457-5873

InvivoGen USA (International): +1 (858) 457-5873

InvivoGen Europe: +33 (0) 5-62-71-69-39

InvivoGen Asia: +852 3622-3480

E-mail: [info@invivogen.com](mailto:info@invivogen.com)