

# PRODUCT DESCRIPTION

## *Mal d 1 (Mal d 1.0108)*

(*Malus domestica*, apple allergen 1)



BIOMAY AG

Vienna Competence Center  
Lazarettgasse 19 Top 1  
A-1090 Wien

Tel: +43 1 7966296-0

Fax: +43 1 7966296-111

e-mail: info@biomay.com

**For research purpose only.**

**Access:**EMBL:AJ417551/Swissprot: Q9SYW3

**MW** = 17,492 Dalton (according to sequence from database without Methionine)

**Mol. Ext. Coeff.:** 14,900; 1 mg/ml  $A_{280}=0.852$   
**pI** = 5.68

**Lot#:** 07

**Amount:** 1 mg

**Quality:** Purity > 98%.

Endotoxin content: 0.002 EU/ $\mu$ g

**Reacts with IgE** from Mal d 1.0108 reactive human serum

### General information:

BIOMAY Mal d 1.0108 is a recombinant protein with IgE-binding capacity. It was produced by heterologous expression in *E. coli*, purified by conventional biochemical methods, and lyophilized from sodium carbonate buffer pH 9.0.

### Quality control of the product:

Purity has been determined on SDS-PAGE gels stained with Coomassie Brilliant Blue R-250. Endotoxin content was determined by using a Limulus Amebocyte Lysate (LAL) assay. The above stated lot tested positive in an IgE-Immunoblot with a standardized pool of human Mal d 1.0108 -reactive sera.

### Storage of lyophilized product:

When stored at  $\leq -20^{\circ}\text{C}$  the quality of the lyophilized material is maintained for several years (see expiration date on the vial). For short periods (max. 3 weeks) the lyophilized product may be kept at room temperature.

### Reconstitution properties:

To achieve a complete solubilization of the product, we recommend to reconstitute the lyophilized protein to a concentration of 1 mg/mL with water containing 1 mM cysteine as thiol reagent. Higher protein concentrations are not recommended. Cysteine can be substituted by other thiol reagents, but suitability of the substitute has to be tested individually. After complete reconstitution the product concentration can be adjusted with the desired buffer as required, whereby the product must be principally soluble under the conditions applied.

### Reconstitution procedure:

Carefully inspect the vial for the location of the lyophilisate pellet. Some lyophilisates or pieces thereof are loose and might be located near the cap. In this case spin down the lyophilisate in a suitable centrifuge. Open the cap just as wide as necessary and pipet 1000  $\mu$ L of water containing 1 mM cysteine into the vial. Close the cap and invert the vial several times, so that the complete lyophilisate and the whole inner surface of the vial are wetted. Incubate the vial for 2 h at room temperature on a rolling or an overhead incubator. Alternatively manual agitation can be applied by inverting the vial several times followed by gentle vortexing. This manual agitation procedure should be repeated several times during the incubation time. After the incubation time carefully visually inspect the tube for remaining undissolved material and eventually continue the incubation until the product is completely dissolved.

### Storage of reconstituted product:

Reconstituted product which is not used directly after reconstitution should be aliquoted in small aliquots (10-50  $\mu$ L) and stored at  $\leq -20^{\circ}\text{C}$ . After thawing use these aliquots at once and avoid repeated freezing/thawing cycles.

\* The mol.ext. coeff. was calculated from the DNA-derived protein sequence as described by Gill, S.C. and by Hippel, P.H. (1989), Analytical Biochemistry **182**, 319-326.

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**pI** = 5.68

**Lot#:** 07  
**Amount:** 200 µg  
**Quality:** Purity > 98%.  
Endotoxin content: 0.002 EU/µg  
**Reacts with IgE** from Mal d 1.0108 reactive human serum

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Carefully inspect the vial for the location of the lyophilisate pellet. Some lyophilisates or pieces thereof are loose and might be located near the cap. In this case spin down the lyophilisate in a suitable centrifuge. Open the cap just as wide as necessary and pipet 200 µL of water containing 1 mM cysteine into the vial. Close the cap and invert the vial several times, so that the complete lyophilisate and the whole inner surface of the vial are wetted. Incubate the vial for 2 h at room temperature on a rolling or an overhead incubator. Alternatively manual agitation can be applied by inverting the vial several times followed by gentle vortexing. This manual agitation procedure should be repeated several times during the incubation time. After the incubation time carefully visually inspect the tube for remaining undissolved material and eventually continue the incubation until the product is completely dissolved.

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