

# PRODUCT DESCRIPTION

## *Der p 23 (Der p 23.0101)*

(*Dermatophagoides pteronyssinus*, house dust mite allergen 23)



### BIOMAY AG

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### For research purpose only.

**Access:** EMBL:ACB46292 UniProt: L7N6F8  
**Molecular Weight:** 9,914 Dalton (according to sequence including the N-terminal tags)  
**Mol. Ext. Coeff.** <sup>1</sup>: 15,720; 1 mg/ml  $A_{280}=1.586$   
**pI** = 4.96

**Lot#:** 02  
**Amount:** 200 µg  
**Purity:** 93% (SDS-PAGE)  
**Endotoxin content:** 0.001 EU/µg  
**IgE-Reactivity:** reacts with IgE from Der p 23.0101 reactive human serum pool

### General information:

BIOMAY Der p 23.0101 is a recombinant protein with IgE-binding capacity. It was produced as a His-tagged protein with a potential TEV cleavage site by heterologous expression in *E. coli*. The protein was purified by conventional biochemical methods and lyophilized from 5 mM sodium phosphate buffer pH 7.4.

### Quality control of the product:

Purity has of the product 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 lot stated above tested positive in an IgE-Immunoblot with a pool of human Der p 23.0101 -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 solubilization of the product of at least 90%, we recommend to reconstitute the lyophilized protein to a concentration of 1 mg/mL with water of appropriate purity. Higher protein concentrations are not recommended. 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.

### Sequence Information:

The sequence of the protein is as follows:

GHHHHHHGSGENLYFQG<sup>2</sup>ANDNDDPTTTVHPTTTEQPDDKFECPFRFGYFADPKDPHKFYICSNWEAVHKDCPG  
NTRWNEDEETC<sup>3</sup>

### 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 200 µL of water of appropriate quality 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 µL) and stored at  $\leq -20^{\circ}\text{C}$ . After thawing use these aliquots at once and avoid repeated freezing/thawing cycles.

<sup>1</sup>) 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.

<sup>2</sup>) N-terminal His-tag sequence followed by a linker sequence and a potential TEV protease cleavage site.

<sup>3</sup>) Allergen specific sequence without signalpeptide.