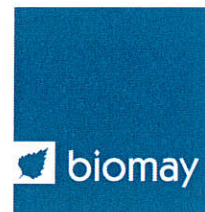


PRODUCT DESCRIPTION

Art v 1a-GAM

(*Artemisia vulgaris*, mugwort pollen allergen 1, Isoform a – His tagged
digested with r-TEV Protease)



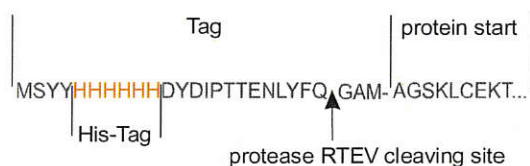
BIOMAY AG
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A-1090 Wien
Tel: +43 1 7966296-0
Fax: +43 1 7966296-111
e-mail: info@biomay.com

For research purpose only.

Access: EMBL: AF493943 UniProt: Q84ZX5
Mw = 11059.3 Dalton (incl. GAM)
Mol. Ext. Coeff.: 8980; 1 mg/ml $A_{280}=0.812^*$
pI = 8.16

Lot#: 01b
Amount: 250 µg
Quality: Purity ≥ 99%.
Endotoxin content: 0,005 EU/µg
Reacts with IgE from Art v1a reactive human serum

General information:



BIOMAY Art v 1a-GAM is the recombinant protein depicted above, digested with r-TEV Protease. While the indicated Tag-Sequence was extensively removed, mass spectroscopy and N-terminal sequencing showed, that approximately 50% of the protein is cleaved after the GAM extension at the correct start of the protein. It was produced by heterologous expression in *E. coli*, purified by conventional biochemical methods, and lyophilized from phosphate buffer, pH 7.4.

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 Amoebocyte Lysate (LAL) assay. The above stated lot tested positive in an IgE-Immunoblot with a standardized pool of human Art v 1a-reactive sera.

Storage of lyophilized product:

When stored at $\leq -15^{\circ}\text{C}$ 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 of appropriate quality. 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.

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 250 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:

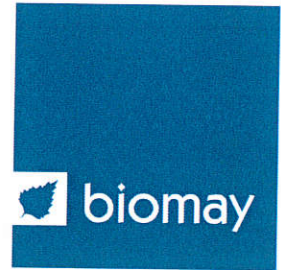
Reconstituted product which is not used directly after reconstitution should be aliquoted in small aliquots (10-50 µL) and stored at $\leq -15^{\circ}\text{C}$. After thawing use these aliquots at once and avoid repeated freezing/thawing cycles.

* 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.

Art v 1a-GAM (Art v 1.0101)

(*Artemisia vulgaris*, mugwort pollen allergen 1, Isoform a – His tagged digested with r-TEV Protease)

For research purpose only.



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PRODUCT DESCRIPTION:

Access # for natural precursor: EMBL:

AF493943 UniProt: Q84ZX5

Mw = 11059.3 Dalton (incl. GAM)

Mol. Ext. Coeff.: 8980; 1 mg/ml $A_{276}=0.812^*$

pI = 8.16

Lot#: 01

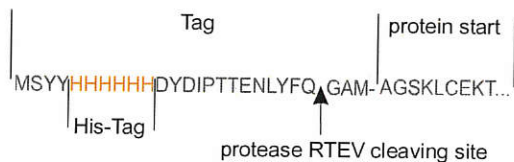
Amount: 1 mg

Quality: Purity > 95%.

Endotoxin content: 0.012 EU/ μ g

Reacts with IgE from Art v1 reactive human serum

General information:



BIOMAY Art v 1a-GAM is the recombinant protein described above digested with r-TEV Protease. N-Terminal Sequencing showed, that after digestion app 50% of the protein is cleaved after the GAM extension at the correct start of the protein. It was produced by heterologous expression in *E. coli*, purified by conventional biochemical methods, and lyophilized from 5 mM PO_4 buffer, pH 7.5.

Reconstitution:

The material can be reconstituted with distilled water (or equivalent) or dilute buffers. Thorough agitating during dissolution is essential. Do not use salt concentrations exceeding 20 mM to dis-

solve the lyophilized material. Salt may be added after dissolution. If reconstituted to 1 mg/ml the product will be soluble to at least 98% and the PO_4 concentration will be 3.5 mM.

Storage:

When stored at $-20^\circ C$ the quality of the material will be maintained for several years. However, for short periods (max. 3 weeks) the lyophilized product may be kept at room temperature. After reconstitution store at $-20^\circ C$. Avoid repeated freezing/thawing.

Quality control:

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. Art v 1a - GAM Lot# 01 tested positive in an IgE-Immunoblot with a standardized pool of human Art v 1-reactive sera.

* The mol.ext.coeff. was calculated from the DNA-derived protein sequence (assuming 50% of cystines are half cystines) as described by Gill, S.C. and by Hippel, P.H. (1989), Analytical Biochemistry **182**, 319-326.