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AAD12 amino-acid homology search for similarity to allergens

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071036

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SUMMARY

(In accordance with 40 CFR part 152, this summary is available  
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STUDY TITLE

AAD12 Amino-Acid Homology Search for Similarity to Allergens

DATA REQUIREMENTS

None

AUTHOR(S)

R. A. Herman

STUDY COMPLETED ON

16-May-2007

PERFORMING LABORATORY

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LABORATORY STUDY ID

071036

## AAD12 Amino-Acid Homology Search for Similarity to Allergens

### SUMMARY

The AAD12 (aryloxyalkanoate dioxygenase 12) protein was evaluated for amino-acid sequence similarity to known allergens based on 8-contiguous amino-acid identity or 35% or greater identity over any 80 amino-acid segment. No matches were found in the FARRP (Food Allergy Research and Resource Program) version 7.00 allergen database.

STUDY TITLE

AAD12 Amino-Acid Homology Search for Similarity to Allergens

DATA REQUIREMENTS

None

AUTHOR(S)

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STUDY COMPLETED ON

16-May-2007

PERFORMING LABORATORY

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STATEMENT OF NO DATA CONFIDENTIALITY CLAIMS

Compound: AAD12

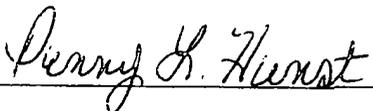
Title: AAD12 Amino-Acid Homology Search for Similarity to Allergens

No claim of confidentiality is made for any information contained in this study on the basis of its falling within the scope of FIFRA Section 10 (d)(1)(A)(B), or (C).\*

Company: Dow AgroSciences LLC

Company Agent: P. L. Hunst

Title: Global Regulatory Trait Leader

Signature: 

Date: 5/9/2007

\*In the United States, the above statement supersedes all other statements of confidentiality that may occur elsewhere in this report.

THIS DATA MAY BE CONSIDERED CONFIDENTIAL IN COUNTRIES OUTSIDE THE UNITED STATES.

STATEMENT OF COMPLIANCE WITH GOOD LABORATORY PRACTICE STANDARDS

Title: AAD12 Amino-Acid Homology Search for Similarity to Allergens

Study Initiation Date: 02/20/2007

Experimental Start Date: 02/20/2007

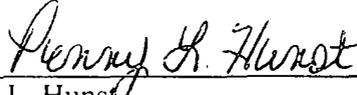
Experiment Termination Date: 02/20/2007

This report represents data generated after the effective date of the EPA FIFRA Good Laboratory Practice Standards.

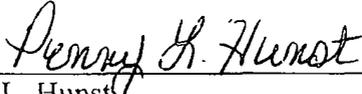
United States Environmental Protection Agency  
Title 40 Code of Federal Regulations Part 160  
FEDERAL REGISTER, August 17, 1989

Organisation for Economic Co-Operation and Development  
ENV/MC/CHEM(98)17, Paris January 26, 1998

This study does not meet requirements of 40 CFR Part 160.

  
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5/9/2007  
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16-May-2007  
\_\_\_\_\_  
Study Completion Date

## QUALITY ASSURANCE STATEMENT

Compound: AAD12

Title: AAD12 Amino-Acid Homology Search for Similarity to Allergens

Study Initiation Date: 02/20/2007

Study Completion Date: 16 May 2007

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**NON-GLP STUDY**

SIGNATURE PAGE



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16-May-2007

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Date



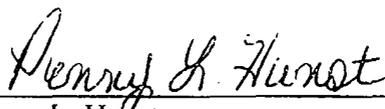
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Date

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## AAD12 Amino-Acid Homology Search for Similarity to Allergens

### ABSTRACT

The AAD12 (aryloxyalkanoate dioxygenase 12) protein was evaluated for amino-acid sequence similarity to known allergens based on 8-contiguous amino-acid identity or 35% or greater identity over any 80 amino-acid segment. No matches were found in the FARRP (Food Allergy Research and Resource Program) version 7.00 allergen database.

## INTRODUCTION

The AAD12 (aryloxyalkanoate dioxygenase 12) protein was evaluated for amino-acid sequence similarity to known allergens based on 8-contiguous amino-acid identity or 35% or greater identity over any 80 amino-acid segment.

## METHODS AND MATERIALS

A script named PAASH v1.1 (Dow AgroSciences notebook E1855 pp. 28-81) was used to search the FARRP (Food Allergy Research and Resource Program, University of Nebraska) version 7.00 allergen database for 8-contiguous amino-acid identity or 35% or greater identity over 80 amino acids using the AAD12 amino-acid sequence (Figure 1) as a template. This program uses FindPatterns and FastA programs from GCG Wisconsin Package v10.3 (Genetics Computer Group, Madison, WI).

## RESULTS AND DISCUSSION

No 8-contiguous amino-acid identity or 35% or greater identity over 80 amino acids was found when the AAD12 sequence was compared to the FAARP version 7.00 allergen database.

FIGURE 1. AMINO ACID SEQUENCE OF AAD12

MAQTFLQITPTGATLGATVTGVHLATLDDAGFAALHAAWLQHALLIFPGQHLSNDQQITFAKRF  
GAIERIGGGDIVAISNVKADGTVRQHSPAEWDDMMKVI VGNMAWHADSTYMPVMAQGAVFSAEV  
VPAVGGRTCFADMRAAYDALDEATRALVHQRSARHSLVYSQSKLGHVQQAGSAYIGYGMDTTAT  
PLRPLVKVHPETGRPSLLIGRHAHAIPGMDAAESERFLEGLVDWACQAPRVHAHQWAAGDVVVW  
DNRCLLHRAEPWDFKLPRVMWHSRLAGRPETEGAALV