Accepted Manuscript

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PII: S0168-1702(17)30526-9

DOI: https://doi.org/10.1016/j.virusres.2017.12.008

Reference: VIRUS 97313

To appear in: Virus Research

Received date: 7-7-2017 Revised date: 15-12-2017 Accepted date: 18-12-2017

Please cite this article as: Lu, Taofeng, Wang, Yuanzhi, Ge, Junwei, Ma, Qin, Yan, Wenzhuo, Zhang, Yuanyuan, Zhao, Lili, Chen, Hongyan, Identification and characterization of a novel B-cell epitope on Aleutian Mink Disease Virus capsid protein VP2 using a monoclonal antibody. Virus Research https://doi.org/10.1016/j.virusres.2017.12.008

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Identification and characterization of a novel B-cell epitope on Aleutian Mink Disease Virus

capsid protein VP2 using a monoclonal antibody

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Research highlights

A specific mAb, 1G5, against AMDV VP2 protein (amino acids: 200~588) is successfully

produced.

The mAb 1G5 can be used to identify the cleavage of the capsid proteins in AMDV

infection.

The minimal linear epitope is located in amino acid residues ⁴⁵⁹EEEGWPAASGTHFED⁴⁷³.

Abstract

Aleutian mink disease is caused by a highly contagious parvovirus (Aleutian mink disease virus,

AMDV). This disease is one of the most commercially important infectious disease worldwide and

causes considerable economic losses to mink farmers. The capsid protein VP2 is the major

immunogenic antigenic protein of AMDV, and is involved in viral tropism, pathogenicity, and host

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