Accepted Manuscript

Title: Indirect ELISA using a multi-epitope recombinant protein to detect antibodies against foot-and-mouth disease virus serotype O in pigs

Authors: Yimei Cao, Wei Zhou, Xiangchuan Xing, Jing Zhang, Yuanfang Fu, Kun Li, Pu Sun, Pinghua Li, Xingwen Bai, Xueqing Ma, Huifang Bao, Dong Li, Yingli Chen, Zengjun Lu, Zaixin Liu

ven

Journal of Virological

Methods

PII: S0166-0934(18)30298-2

DOI: https://doi.org/10.1016/j.jviromet.2018.09.008

Reference: VIRMET 13539

To appear in: Journal of Virological Methods

Received date: 6-6-2018 Revised date: 18-9-2018 Accepted date: 18-9-2018

Please cite this article as: Cao Y, Zhou W, Xing X, Zhang J, Fu Y, Li K, Sun P, Li P, Bai X, Ma X, Bao H, Li D, Chen Y, Lu Z, Liu Z, Indirect ELISA using a multi-epitope recombinant protein to detect antibodies against foot-and-mouth disease virus serotype O in pigs, *Journal of Virological Methods* (2018), https://doi.org/10.1016/j.jviromet.2018.09.008

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Indirect ELISA using a multi-epitope recombinant protein to detect antibodies against foot-and-mouth disease virus serotype O in pigs

Yimei Cao^{a*}, Wei Zhou^{a, b}, Xiangchuan Xing^{a, b}, Jing Zhang^a, Yuanfang Fu^a, Kun Li^a, Pu Sun^a, Pinghua Li^a, Xingwen Bai^a, Xueqing Ma^a, Huifang Bao^a, Dong Li^a, Yingli Chen^a, Zengjun Lu^{a*}, Zaixin Liu^{a*}

^aState Key Laboratory of Veterinary Etiological Biology, OIE/National Foot-and-Mouth Disease Reference Laboratory of China, Lanzhou Veterinary Research Institute, Chinese Academy of Agricultural Sciences, Lanzhou 730046, China

^bTianjin Weite Biological Medicine Co., Ltd., Tianjin 300301, China

*Corresponding author

Tel: +86-931-8343390; Fax: +86-931-8342052.

E-mail: caoyim518@126.com; luzengjun@caas.cn; liuzaixin@caas.cn

Corresponding address: Lanzhou Veterinary Research Institute, Chinese Academy of Agricultural Sciences, Xujiaping No. 1, Yanchangpu, Lanzhou, Gansu 730046, China

Highlights

- An indirect ELISA was developed to detect antibodies against FMDV serotype O in pigs.
- The specificity and sensitivity of I-ELISA were 96.7% and 95.9% respectively.
- I-ELISA serum values of B4-vaccinated pigs correlated closely with clinical protection (p < 0.01).
- I-ELISA was suitable for detecting antibodies from pigs vaccinated with inactivated vaccine.

Download English Version:

https://daneshyari.com/en/article/11025429

Download Persian Version:

 $\underline{https://daneshyari.com/article/11025429}$

Daneshyari.com