

Accepted Manuscript

Kinetics of Interferon gamma and Interleukin-21 response following foot and mouth disease virus infection

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PII: S0882-4010(18)31264-6

DOI: [10.1016/j.micpath.2018.08.049](https://doi.org/10.1016/j.micpath.2018.08.049)

Reference: YMPAT 3134

To appear in: *Microbial Pathogenesis*

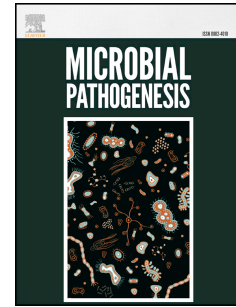
Received Date: 11 July 2018

Revised Date: 21 August 2018

Accepted Date: 23 August 2018

Please cite this article as: Sharma AK, Bhatt M, Sankar M, Mohapatra JK, Dash BB, Gowane GR, Subramaniam S, Ranjan R, Pattnaik B, Kinetics of Interferon gamma and Interleukin-21 response following foot and mouth disease virus infection, *Microbial Pathogenesis* (2018), doi: 10.1016/j.micpath.2018.08.049.

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1 **Kinetics of Interferon gamma and Interleukin-21 response following foot and**
2 **mouth disease virus infection**

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11 **ABSTRACT**

12 Foot and mouth disease (FMD) is one of the most contagious diseases of cloven
13 footed animals causing significant economic impediment in livestock production
14 system. The immune response to FMD virus (FMDV) infection is regulated by a
15 complex interplay between various cells, cytokines and other immune
16 components. Based on the well established role of Interferon-gamma (IFN- γ) and
17 Interleukin-21 (IL-21) in viral infections, this study aimed to determine
18 expression level of these cytokines in clinically infected adults and calves; and the
19 results were compared with those in the subclinically infected animals up to 120
20 days post outbreak (DPO) in a vaccinated cattle herd. The expression level of
21 IFN- γ and IL-21 was assayed on 0, 7, 14, 28, 60, 90, and 120 DPO by enzyme

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