Accepted Manuscript

Title: Evaluation of interferon-stimulated genes in peripheral blood granulocytes as sensitive responders to bovine early conceptus signals

Authors: N. Toji, S. Shigeno, K. Kizaki, K. Koshi, H. Matsuda, Y. Hashiyada, K. Imai, T. Takahashi, T. Ishiguro-Oonuma, K. Hashizume

PII: \$1090-0233(17)30189-2

DOI: https://doi.org/10.1016/j.tvjl.2017.10.007

Reference: YTVJL 5043

To appear in:

Accepted date: 17-10-2017

Please cite this article as: N.Toji, S.Shigeno, K.Kizaki, K.Koshi, H.Matsuda, Y.Hashiyada, K.Imai, T.Takahashi, T.Ishiguro-Oonuma, K.Hashizume, Evaluation of interferon-stimulated genes in peripheral blood granulocytes as sensitive responders to bovine early conceptus signals (2010), https://doi.org/10.1016/j.tvjl.2017.10.007

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

Original Article

Evaluation of interferon-stimulated genes in peripheral blood granulocytes as sensitive responders to bovine early conceptus signals

N. Toji ^{a,b}, S. Shigeno ^a, K. Kizaki ^{a,b}, K. Koshi ^a, H. Matsuda ^c, Y. Hashiyada ^c, K. Imai ^d, T. Takahashi ^{a,b}, T. Ishiguro-Oonuma ^{a,b}, K. Hashizume ^{a,*}

^a Cooperative Department of Veterinary Medicine, Faculty of Agriculture, Iwate University, 3-18-8 Ueda, Morioka, Iwate 020-8550, Japan

^b The United Graduate School of Veterinary Sciences, Gifu University, 1-1 Yanagito, Gifu, Gifu 501-1112, Japan

^c National Livestock Breeding Centre, 1 Odakurahara, Nishigo, Fukushima 961-8511, Japan

^d Department of Sustainable Agriculture, College of Agriculture, Food and Environment Sciences, Rakuno Gakuen University, 582 Midorimachi, Bunkyodai, Ebetsu, Hokkaido 069-8501, Japan

* Corresponding author. Tel.: +08-19-621-6210 *E-mail address:* <u>kazuha@iwate-u.ac.jp</u> (K. Hashizume).

Highlights

- 1. Expression of interferon receptors was higher in peripheral blood granulocytes than in mononuclear cells.
- 2. Changes in global gene expression were observed in granulocytes treated with recombinant interferon-tau (IFNT).
- 3. Interferon-stimulated genes were also highly expressed in recombinant IFNT-treated granulocytes.
- 4. Granulocytes specifically responded to IFNT and its gene expression is a suitable tool to determine pregnancy status.

Abstract

Early detection of gestation is important in the bovine industry. New methods have been developed to detect gene expression in leucocytes induced by interferon-tau (IFNT) as gestation biomarkers. However, it is

Download English Version:

https://daneshyari.com/en/article/8505039

Download Persian Version:

https://daneshyari.com/article/8505039

<u>Daneshyari.com</u>