Accepted Manuscript

Gene expression profiling in colon of mice exposed to food additive titanium dioxide (E171)

Héloïse Proquin, Marlon J. Jetten, Marloes C.M. Jonkhout, Luis G. Garduño-Balderas, Jacob J. Briedé, Theo M. de Kok, Yolanda I. Chirino, Henk van Loveren

PII: S0278-6915(17)30669-5

DOI: 10.1016/j.fct.2017.11.011

Reference: FCT 9396

To appear in: Food and Chemical Toxicology

Received Date: 5 July 2017

Revised Date: 20 October 2017 Accepted Date: 7 November 2017

Please cite this article as: Proquin, Héï., Jetten, M.J., Jonkhout, M.C.M., Garduño-Balderas, L.G., Briedé, J.J., de Kok, T.M., Chirino, Y.I., van Loveren, H., Gene expression profiling in colon of mice exposed to food additive titanium dioxide (E171), *Food and Chemical Toxicology* (2017), doi: 10.1016/j.fct.2017.11.011.

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.



Gene Expression Profiling in Colon of Mice Exposed to Food Additive Titanium Dioxide (E171)

Héloïse Proquin^{1*}, Marlon J. Jetten¹, Marloes C.M. Jonkhout¹, Luis G. Garduño-Balderas², Jacob J. Briedé¹, Theo M. de Kok¹, Yolanda I. Chirino^{2,3}, Henk van Loveren¹

Abbreviations:

AOM: Azoxymethane AU: Arbitrary Units

CPDB: Consensus Pathway DataBase

CRC: Colorectal cancer

DEG: Differentially Expressed Genes

DSS: Dextran Sodium Sulphate

EFSA: European Food Safety Authority

FES: Feature Extraction Software

GSEA: Gene Set Enrichment Analysis GPCR: G-Protein Coupled Receptor

H&E: Hematoxylin & Eosin

LIMMA: Linear Mix Model Analysis for Microarrays

MPs: Microparticles NPs: Nanoparticles

ORA: Over-Representation gene set Analysis

PBS: Phosphate-Buffered Saline RIN: RNA Integrity Number ROS: Reactive Oxygen Species

TiO₂: Titanium dioxide

¹ Department of Toxicogenomics, GROW Institute of Oncology and Developmental Biology, Maastricht University, the Netherlands

² Laboratorio de Carcinogénesis y Toxicología, Unidad de Biomedicina, FES-Iztacala, UNAM, Estado de México, México

³IUF-Leibniz Research Institute for Environmental Medicine, Auf'm Hennekamp 50, 40225 DE Düsseldorf, Germany

^{*}Corresponding author: Héloïse Proquin, Department of Toxicogenomics, Maastricht University, P.O. Box 616, 6200 MD Maastricht, The Netherlands. T: +31 43 3883986. F: +31 43 3884146. Email: h.proquin@maastrichtuniversity.nl

Download English Version:

https://daneshyari.com/en/article/8548512

Download Persian Version:

https://daneshyari.com/article/8548512

<u>Daneshyari.com</u>