


















Legends to Supplementary videos

Original article:

VALIDATION OF NBD-COUPLED TAUROCHOLIC ACID FOR INTRAVITAL ANALYSIS OF BILE ACID TRANSPORT IN LIVER AND KIDNEY OF MICE

Ahmed Ghallab^{1,2*} , Sebastian Kunz³ , Celine Drossel⁴ , Veronica Billo³ ,
Adrian Friebel⁵ , Mats Georg⁴ , Richard Göttlich⁴ , Zaynab Hobloss¹ ,
Reham Hassan^{1,2} , Maiju Myllys¹ , Abdel-latif Seddek² , Noha Abdelmageed⁶ ,
Paul A. Dawson⁷ , Erik Lindström⁸ , Stefan Hoehme⁵ , Jan G. Hengstler^{1*#} ,
Joachim Geyer^{3*#} 

¹ Department of Toxicology, Leibniz Research Centre for Working Environment and Human Factors, Technical University Dortmund, Ardeystr. 67, 44139 Dortmund, Germany

² Department of Forensic Medicine and Toxicology, Faculty of Veterinary Medicine, South Valley University, 83523 Qena, Egypt

³ Institute of Pharmacology and Toxicology, Justus Liebig University Giessen, Biomedical Research Center Seltersberg, Schubertstr. 81, 35392 Giessen, Germany

⁴ Institute of Organic Chemistry, Justus Liebig University Giessen, Heinrich-Buff-Ring 17, 35392, Giessen, Germany

⁵ Institute of Computer Science & Saxonian Incubator for Clinical Research (SIKT), University of Leipzig, Haertelstraße 16-18, 04107 Leipzig, Germany

⁶ Department of Pharmacology, Faculty of Veterinary Medicine, Sohag University, 82524 Sohag, Egypt

⁷ Department of Pediatrics, Division of Gastroenterology, Hepatology, and Nutrition, Emory University, Atlanta, GA 30322, USA

⁸ Albireo Pharma, Inc., Boston, MA 02109, USA

Indicates shared senior authorship

* **Corresponding authors:** Ahmed Ghallab, Jan G. Hengstler, Department of Toxicology, Leibniz Research Centre for Working Environment and Human Factors, Technical University Dortmund, Ardeystr. 67, 44139 Dortmund, Germany. E-mail: ghallab@ifado.de; hengstler@ifado.de

Joachim Geyer, Institute of Pharmacology and Toxicology, Justus Liebig University Giessen, Biomedical Research Center Seltersberg, Schubertstr. 81, 35392 Giessen, Germany. E-mail: Joachim.M.Geyer@vetmed.uni-giessen.de

<https://dx.doi.org/10.17179/excli2024-7707>

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>).

Suppl. video 1: Kinetics of 3 β -NBD-TCA in the liver of a WT mouse. Red: TMRE; green: 3 β -NBD-TCA; blue: Hoechst 33258. The data corresponds to **Figure 5** of the main manuscript.

Suppl. video 2: Kinetics of 3 β -NBD-TCA in the liver of a WT mouse treated with Myrcludex B. Red: TMRE; green: 3 β -NBD-TCA; blue: Hoechst 33258. The data corresponds to **Figure 5** of the main manuscript.

Suppl. video 3: Kinetics of 3 β -NBD-TCA in the liver of an mOatp1a/1b cluster knockout mouse. Red: TMRE; green: 3 β -NBD-TCA; blue: Hoechst 33258. The data corresponds to **Figure 6** of the main manuscript.

Suppl. video 4: Kinetics of 3 β -NBD-TCA in the liver of an mOatp1a/1b cluster knockout mouse treated with Myrcludex B. Red: TMRE; green: 3 β -NBD-TCA; blue: Hoechst 33258. The data corresponds to **Figure 6** of the main manuscript.

Suppl. video 5: Kinetics of 3 β -NBD-TCA in kidneys of an mOatp1a/1b cluster knockout mouse. Red: TMRE; green: 3 β -NBD-TCA; blue: Hoechst 33258. The data corresponds to **Figure 7** of the main manuscript.

Suppl. video 6: Kinetics of 3 β -NBD-TCA in kidneys of an mOatp1a/1b cluster knockout mouse treated with Myrcludex B. Red: TMRE; green: 3 β -NBD-TCA; blue: Hoechst 33258. The data corresponds to **Figure 7** of the main manuscript.

Suppl. video 7: Kinetics of 3 β -NBD-TCA in kidneys of an mOatp1a/1b cluster knockout mouse treated with Myrcludex B and AS0369. Red: TMRE; green: 3 β -NBD-TCA; blue: Hoechst 33258. The data corresponds to **Figure 9** of the main manuscript.