Original article:

INDUCTION AND REPRESSION EFFECTS ON CYP AND TRANSPORTER PROTEIN ABUNDANCE BY AZOLE MIXTURE UPTAKE IN RAT LIVER

Helen Hammer¹,³, Flavia Schmidt², Tanja Heise², Constanze Knebel², Alexander Dabrowski², Hannes Planatscher¹,³, Carsten Kneuer², Philip Marx-Stoelting², Oliver Pötz¹,³,*

¹ NMI Natural and Medical Sciences Institute at the University of Tübingen, Reutlingen, Germany
² BfR, Department of Pesticides Safety, Max-Dohrn-Str. 8-10, 10589 Berlin, Germany
³ SIGNATOPE GmbH, Reutlingen, Germany

* Corresponding author: Oliver Pötz, NMI Natural and Medical Sciences Institute at the University of Tübingen, Markwiesenstrasse 55, 72770 Reutlingen, Germany, E-mail: poetz@nmi.de

http://dx.doi.org/10.17179/excli2020-2311

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0/).
| Motif | Frequency [%] | Antigen | Target | #Peptides/Tags | Peptide Ratio |
|-------|---------------|---------|--------|---------------|--------------|
| ALEK  | 100           | SLC10A1 | EATR   | 36 / 4        | 8.6%         |
| DLFK  | 100           | SLC22A7, -A8 | EASR | 90 / 15       | 20.4%        |
| EASR  | 100           | CYP2E1  |        | 69 / 11       | 11.8%        |

| Motif | Frequency [%] | Antigen | Target | #Peptides/Tags | Peptide Ratio |
|-------|---------------|---------|--------|---------------|--------------|
| FSGR  | 100           | CYP2B3, -2C11 -2C12, -2C13, -2C55 | ABCC3 | 195 / 21      | 21.1%        |
| GGEK  | 100           | ABCC3   |        | 61 / 7        | 17.7%        |
| LDDR  | 100           | CYP2B2  |        | 126 / 17      | 33.3%        |

| Motif | Frequency [%] | Antigen | Target | #Peptides/Tags | Peptide Ratio |
|-------|---------------|---------|--------|---------------|--------------|
| LISK  | 100           | CYP1A1, -1A2 |        | 90 / 5        | 22.6%        |
| LPNK  | 100           | CYP3A9  |        | 21 / 5        | 20%          |
| LTR   | 100           | ABCB1, -B1a, -B11 |        | 122 / 13      | 10.8%        |

| Motif | Frequency [%] | Antigen | Target | #Peptides/Tags | Peptide Ratio |
|-------|---------------|---------|--------|---------------|--------------|
| NGER  | 100           | CYP2B1, -2B2 |        | 49 / 9        | 9.1%         |
| QDIR  | 100           | ABCB1, -B1a |        | 97 / 16       | 20.0%        |
| YQVR  | 100           | ABCC2   |        | 71 / 13       | 29.2%        |
Supplementary Figure 1: Characterization of TXP antibody binding motifs. All used TXP antibodies were characterized as described in detail for the anti-FTNR antibody in Fehler! Verweisquelle konnte nicht gefunden werden.. Immunoprecipitation of 20 µg proteolyzed human cell line blend containing equal amounts of HepG2, HEK 293 and HCT116 was performed with each TXP antibody. The precipitated peptides were identified via non-targeted MS analysis. All c-termini which were enriched significantly by the immunoprecipitation were included in the motif. The antigen and intended target proteins are listed as well as the number of identified peptides and c-terminal tags the motif is based on. The peptide ratio describes the number of peptides containing the target antigen which were precipitated in comparison to the number of peptides determined by in-silico digest.