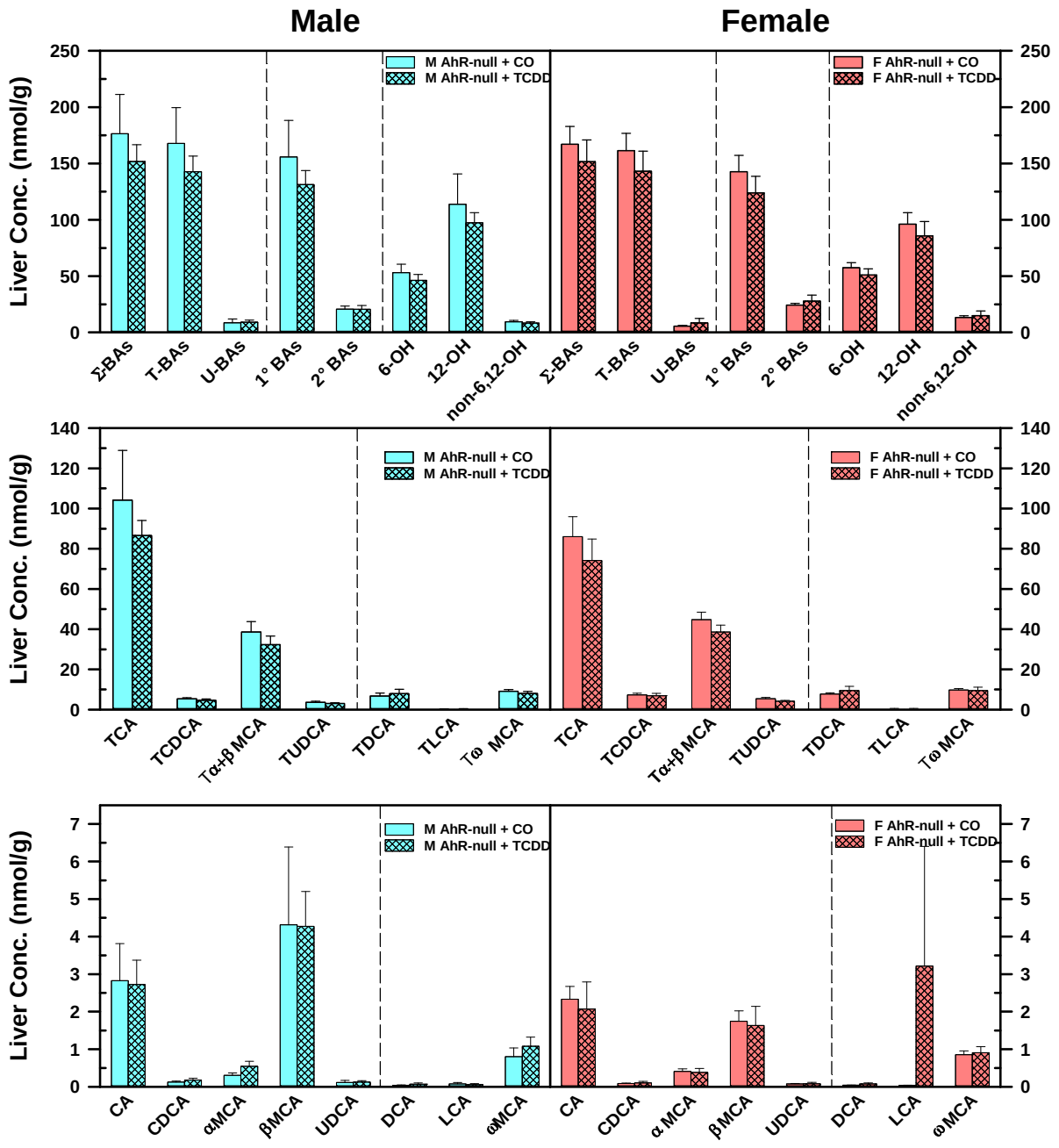
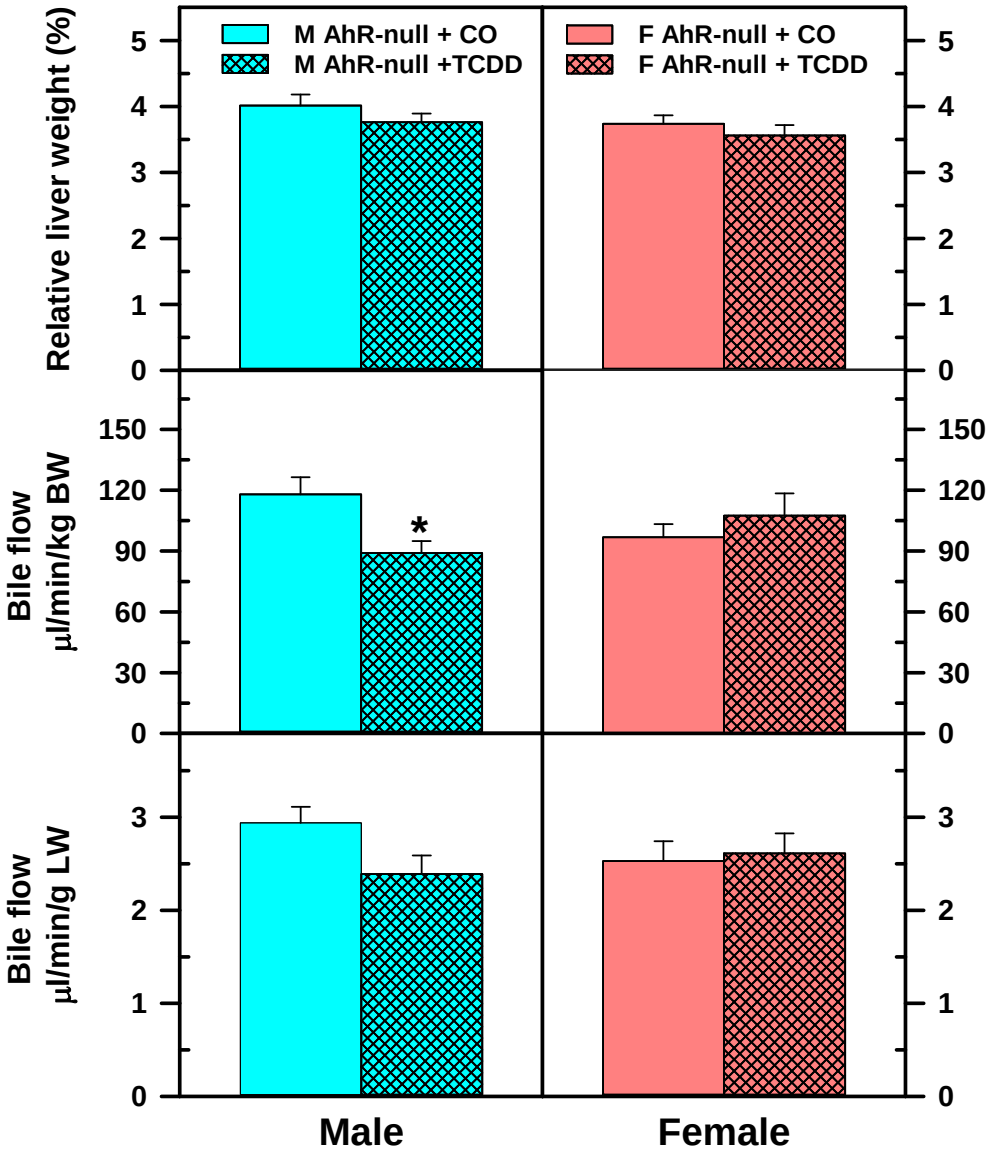
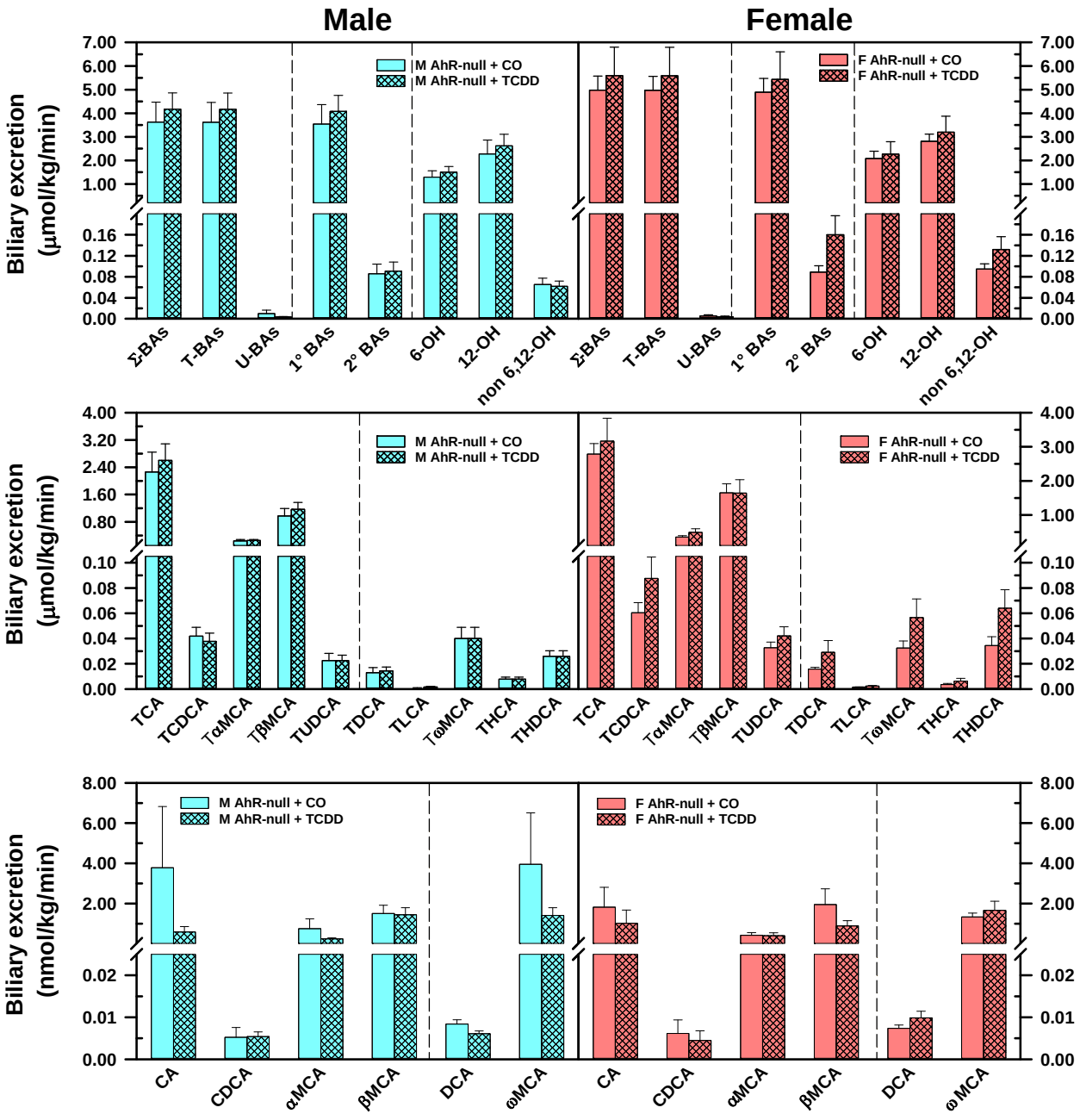


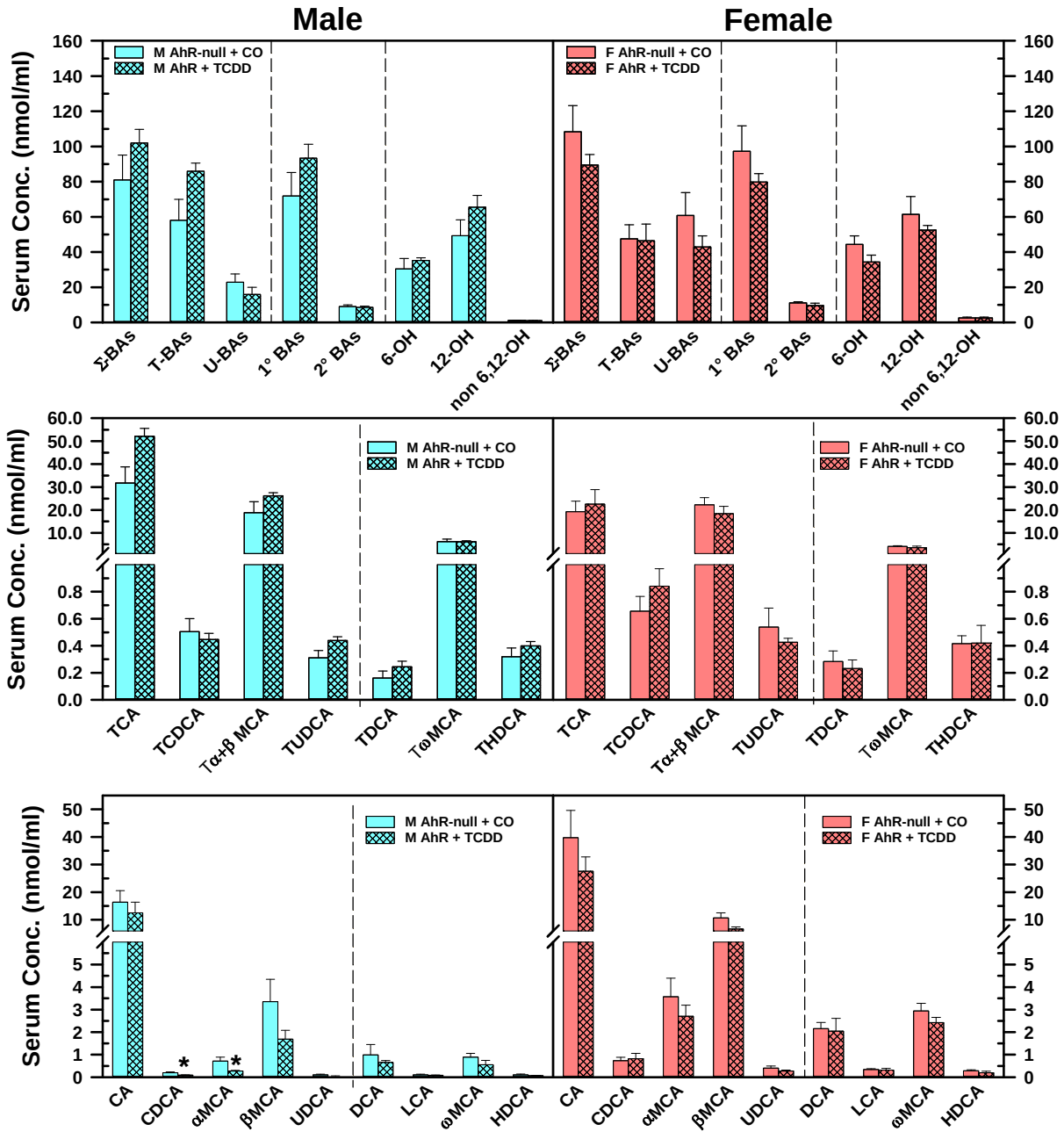
Suppl. Fig. 1. Effect of TCDD on hepatic concentrations of total bile acids (top), individual T-conjugated bile acids (middle), and individual unconjugated bile acids (bottom) in AhR-null male (light blue bars) and female mice (pink bars). Corn oil (vehicle) or TCDD (37 μg/kg) was administered daily (IP) for 4 days to male and female mice (at least 6 mice per treatment group). On the 5th day after the first dose, livers were harvested and the individual BAs were quantified by UPLC-MS/MS. Bars represent the mean ±SE of mice per treatment group. Asterisks indicate significant difference ($p < 0.05$) from the respective value of the WT. Primary bile acids (1° BAs), secondary bile acids(2°BAs), 6-hydroxylated bile acids (6-OH), 12α-hydroxylated (12-11 OH) bile acids, Aryl hydrocarbon receptor-null mice (AhR-null), cholic acid (CA), chenodeoxycholic acid (CDCA), deoxycholic acid (DCA), females (F), lithocholic acid (LCA), males (M), muricholic acid (MCA), Non 6-, non 12α-hydroxylated bile acids (non-6,12-OH), total bile acids (Σ-BAs), T-conjugated bile acids (T-BAs), 2,3,7,8-tetrachlorodibenzo-*p*-dioxin (TCDD), unconjugated bile acids (U-BAs), ursodeoxycholic acid (UDCA). Color image is available in the online version of the article.



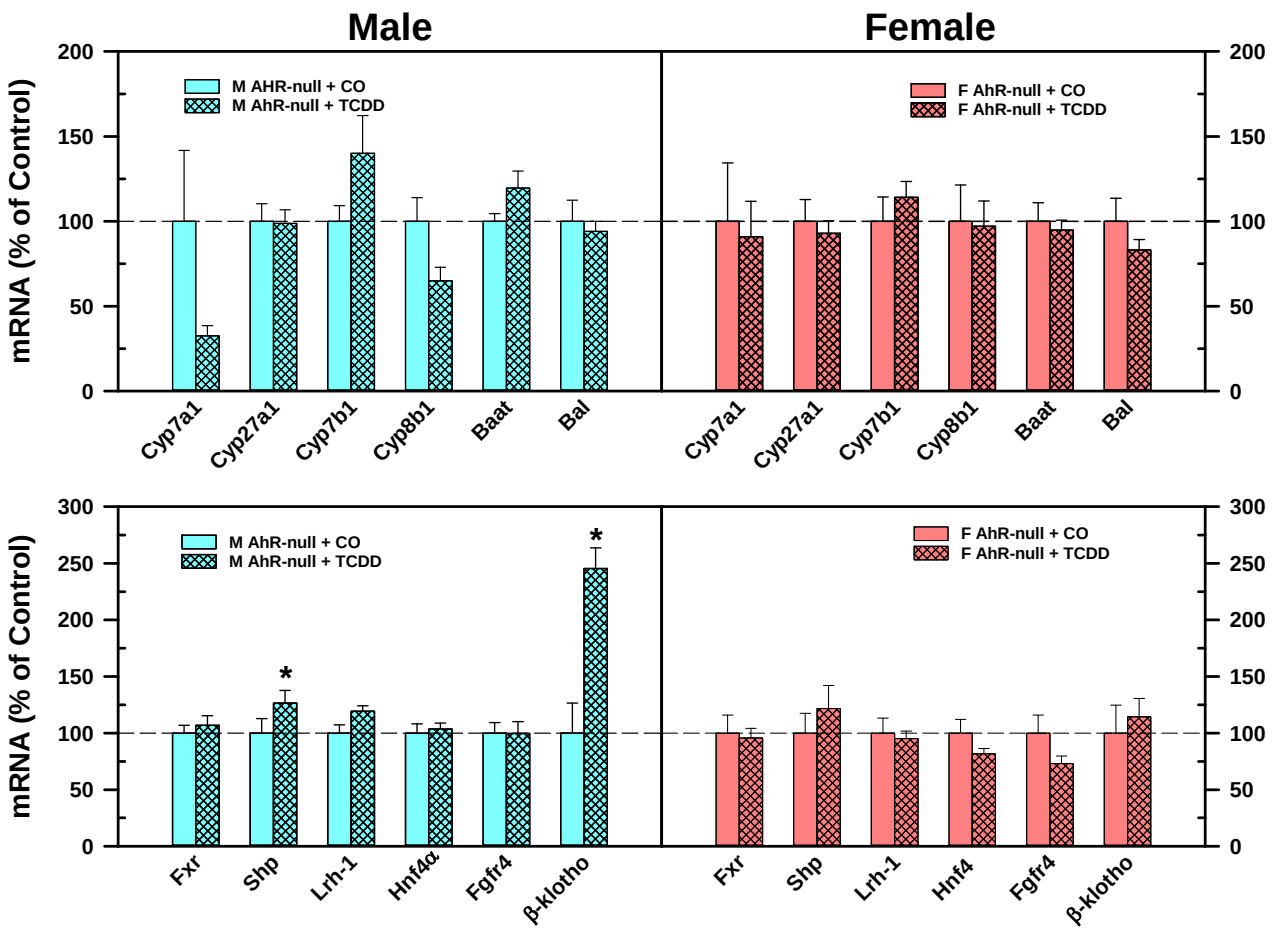
Suppl. Fig. 2. Relative liver weight and bile flow in AhR-null male and female mice. Corn oil (vehicle) or TCDD (37 µg/kg) was administered daily (IP) for 4 days to male and female mice (at least 6 mice per treatment group). On the 5th day, livers and bile were collected. Liver weight is expressed as a percent of bodyweight (BW) (top). Bile flow rates were normalized to BW (middle) and liver weight (bottom). Bars represent means ± SE of mice per group. Asterisks indicate significant difference ($p < 0.05$) from the respective value of the WT. Aryl hydrocarbon receptor-null mice (AhR-null), females (F), males (M), 2,3,7,8-tetrachlorodibenzo-*p*-dioxin (TCDD). Color image is available in the online version of the article.



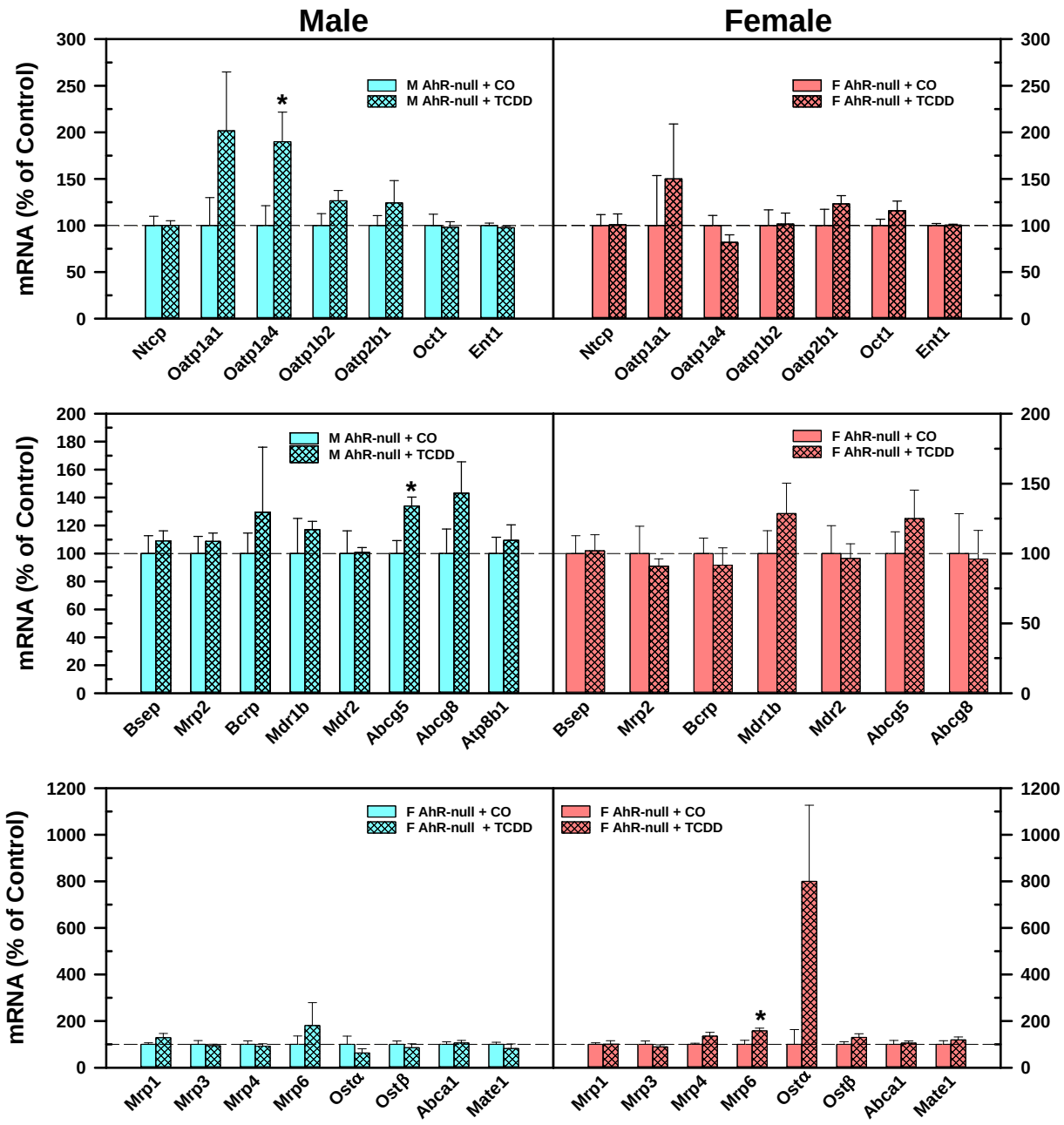
Suppl. Fig. 3. Effect of TCDD on biliary excretion of total bile acids (top), individual T-conjugated bile acids (middle), and individual unconjugated bile acids (bottom) in AhR null male (light blue bars) and female mice (pink bars). Corn oil (vehicle) or TCDD (37 µg/kg) was administered daily (IP) for 4 days to male and female mice (at least 6 mice per treatment group). On the 5th day after the first dose, bile was collected for 40 min and the individual BAs were quantified by UPLC-MS/MS. Bars represent the mean ± SE of mice per group. Asterisks indicate significant difference ($p < 0.05$) from the respective value of the WT. Primary bile acids (1° BAs), secondary bile acids(2°BAs), 6-hydroxylated bile acids (6-OH), 12α-hydroxylated (12-OH) bile acids, Non 6-, non 12α-hydroxylated bile acids (non-6,12-OH), Aryl hydrocarbon receptor-null mice (AhR-null), cholic acid (CA), chenodeoxycholic acid (CDCA), deoxycholic acid (DCA), females (F), hyocholic acid (HCA), hyodeoxycholic acid (HDCA), lithocholic acid (LCA), Males (M), muricholic acid (MCA), total bile acids (Σ-BAs), T-conjugated bile acids (T-BAs), 2,3,7,8-tetrachlorodibenzo-*p*-dioxin (TCDD), unconjugated bile acids (U-BAs), ursodeoxycholic acid (UDCA). Color image is available in the online version of the article.



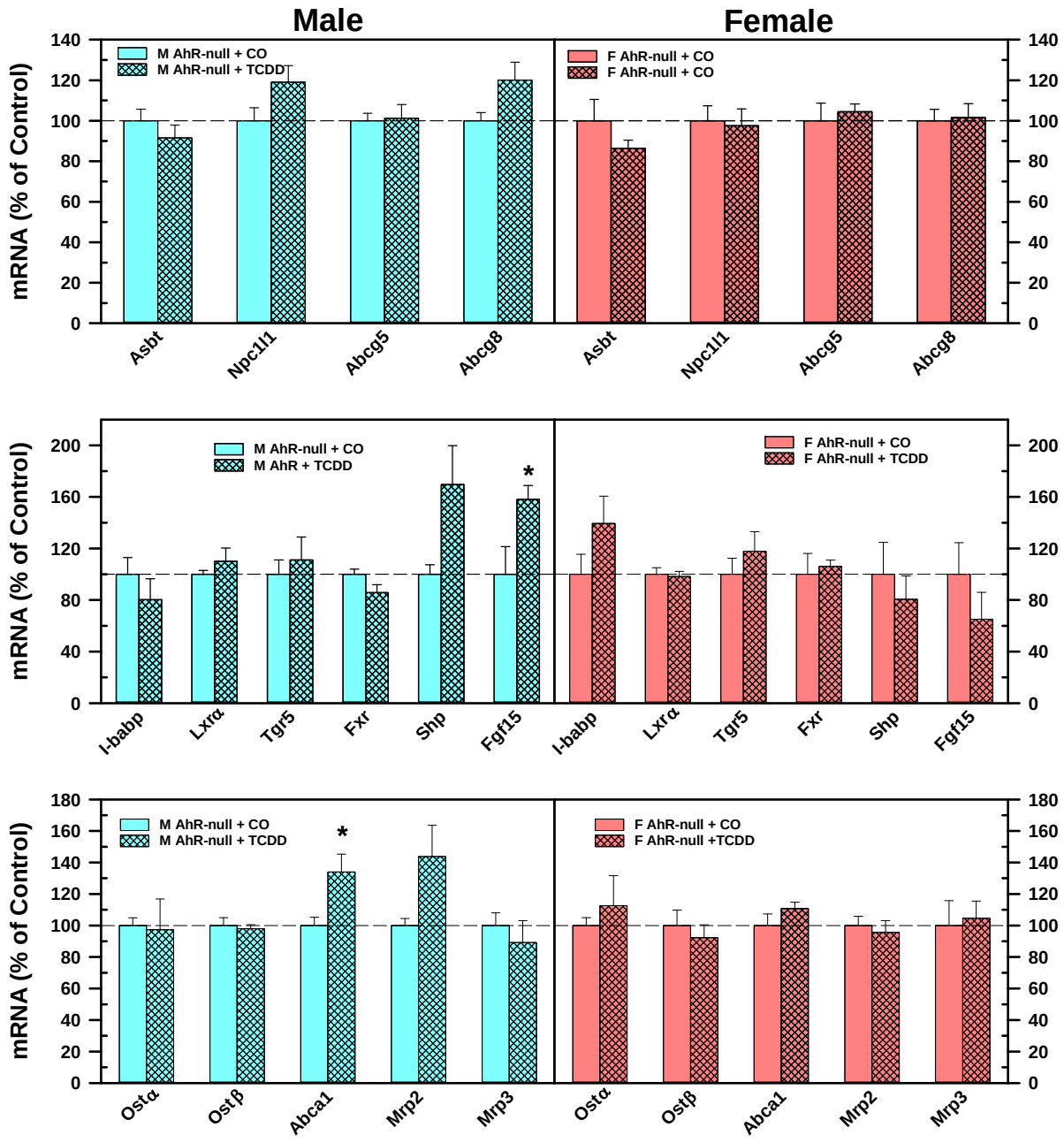
Suppl. Fig. 4. Effect of TCDD on serum concentration of total bile acids (top), individual T-conjugated bile acids (middle), and individual unconjugated bile acids (bottom) in AhR-null male (light blue bars) and female mice (pink bars). Corn oil (vehicle) or TCDD (37 µg/kg) was administered daily (IP) for 4 days to male and female mice (at least 6 mice per treatment group). On the 5th day after the first dose, blood was collected and the individual BAs were quantified in sera by UPLC-MS/MS. Bars represent the mean ± SE of mice per group. Asterisks indicate significant difference ($p < 0.05$) from the respective value of the WT. Primary bile acids (1° BAs), secondary bile acids(2°BAs), 6-hydroxylated bile acids (6-OH), 12α-hydroxylated (12-OH) bile acids, Aryl hydrocarbon receptor-null mice (AhR-null), cholic acid (CA), chenodeoxycholic acid (CDCA), deoxycholic acid (DCA), females (F), hyodeoxycholic acid (HDCA), lithocholic acid (LCA), males (M), muricholic acid (MCA), Non 6-, non 12α-hydroxylated bile acids (non-6,12-OH), total bile acids (Σ-BAs), T-conjugated bile acids (T-BAs), 2,3,7,8-tetrachlorodibenzo-*p*-dioxin (TCDD), unconjugated bile acids (U-BAs), ursodeoxycholic acid (UDCA). Color image is available in the online version of the article.



Suppl. Fig. 5. Effect of TCDD on mRNA of BA synthesis (top) and regulation (bottom) in livers of AhR-null male (light blue bars) and female mice (pink bars). Corn oil (vehicle) or TCDD (37 µg/kg) was administered daily (IP) for 4 days to male and female mice (at least 6 mice per treatment group). On the 5th day after the first dose, livers were harvested. Total RNA was analyzed by QuantiGene Plex 2.0 Assay, as well as by RT qPCR. Relative mRNA levels were calculated with vehicle controls set as 100%. Bars represent the relative percentage mRNA expression ± SE of mice per group. Asterisks indicate significant difference ($p < 0.05$) from the respective value of the WT. Aryl hydrocarbon receptor-null mice (AhR-null), Bile acid CoA:amino acid N-acyltransferase (Baat), Bile acid CoA ligase (Bal), Cytochrome p450 (Cyp), Farnesoid x receptor (Fxr), females (F), Fibroblast growth factor receptor (Fgfr4), Hepatocyte nuclear factor 4a (Hnf4a), Liver receptor homolog-1 (Lrh-1), males (M), Small heterodimer partner (Shp), 2,3,7,8-tetrachlorodibenzo-*p*-dioxin (TCDD). Color image is available in the online version of the article.



Suppl. Fig. 6. Effect of TCDD on mRNA expression of basolateral uptake (top), canalicular (middle), and basolateral efflux (bottom) transporters in livers of AhR-null male (light blue bars) and female mice (pink bars). Corn oil (vehicle) or TCDD (37 µg/kg) was administered daily (IP) for 4 days to male and female mice (at least 6 mice per treatment group). On the 5th day after the first dose, livers were harvested. Total RNA was analyzed by QuantiGene Plex 2.0 Assay, as well as by RT-qPCR. Bars represent the relative percentage mRNA expression ± SE of mice per group. Asterisks indicate significant difference ($p < 0.05$) from the respective value of the WT. Aryl hydrocarbon receptor-null mice (AhR-null), Breast cancer resistance protein (Bcrp), Bile salt export pump (Bsep), Equilibrative nucleoside transporter (Ent), females (F), males (M), Multidrug and toxin extrusion transporter (Mate), Multidrug resistance protein (Mdr), Multidrug resistance-associated protein (Mrp), Na(+)-taurocholate cotransporting polypeptide (Ntcp), Organic anion transporting polypeptide (Oatp), Organic cation transporter (Oct), Organic solute transporter (Ost), 2,3,7,8-tetrachlorodibenzo-*p*-dioxin (TCDD). Color image is available in the online version of the article.



Suppl. Fig. 7. Effect of TCDD on mRNA BA regulators and transporters in ilea of AhR-null male (light blue bars) and female mice (pink bars). Corn oil (vehicle) or TCDD (37 µg/kg) was administered daily (IP) for 4 days to male and female mice (at least 6 mice per treatment group). On the 5th day after the first dose, ilea were harvested. Total RNA was analyzed by QuantiGene Plex 2.0 Assay, as well as by RT-qPCR. Relative mRNA levels were calculated with vehicle controls set as 100%. Bars represent the relative percentage mRNA expression ± SE of mice per group. Asterisks indicate significant difference ($p < 0.05$) from the respective value of the WT. ATP-binding cassette (Abc), Aryl hydrocarbon receptor-null mice (AhR-null), Apical sodium-dependent bile acid transporter (Asbt), Farnesoid X Receptor (Fxr), females (F), Fibroblast growth factor (Fgf), I-babp (ileal bile acid binding protein), Liver x receptor a (Lxra), males (M), Multidrug resistance-associated protein (Mrp), Nieman-Pick c1-like 1 (Npc1l1), Organic solute transporter (Ost), total bile acids (R-BAs), Small heterodimer partner (Shp), 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD), Transmembrane G protein-coupled receptor 5 (Tgr5). Color image is available in the online version of the article.