Supplemental Data

Figure Legends

Figure 7. Effect of extracellular pH on solute transport by rat Oatp1a5, human OATP1A2, and human OATP2B1. COS cells were transiently transfected with (A, B) human OATP1A2, (C, D) rat Oatp1a5, (E, F) human OATP2B1 expression plasmid or a mixture of control plasmids. The transfected COS cells were pre-incubated for 30 min in uptake buffers at the indicated pH, and then incubated for 10 min in the same buffer plus 5 μM [^{3}H]taurocholate or [^{3}H]estrone-3-sulfate at 37°C. The cells were then processed to determine the cell-associated protein and radioactivity. Each bar represents the mean $\pm$ SEM of triplicate determinations. ** $P < 0.005$, versus control plasmids-transfected cells (YFP).

Figure 8. Uptake of radiolabeled solutes by MDCK-rat Oatp1a5 cells. MDCK-rat Oatp1a5 cells were incubated with (Oatp1a5) or without (control) sodium-butyrate to induce Oatp1a5 expression. After 20 h, the cells were washed and incubated in DMEM for 10 min at 37°C with the indicated concentrations of (A) [^{3}H]azithromycin, (B) [^{3}H]taurocholate, or (C) [^{3}H]clarithromycin and then processed to determine cell-associated radioactivity. Each bar represents the mean $\pm$ SEM of triplicate determinations. ** $P < 0.005$, versus uninduced cells.

Figure 9. Inhibition of estrone-3-sulfate uptake by macrolides in mouse Oatp2b1-transfected COS cells. COS cells were transiently transfected with mouse Oatp2b1 or control expression plasmid. The transfected COS cells were incubated for 10 min at 37°C with 5 μM [^{3}H]estrone-3-sulfate plus 250 μM of the indicated competitor. The Oatp2b1-specific uptake was determined by subtracting the [^{3}H]estrone-3-sulfate uptake for control expression plasmid-transfected COS cells incubated under parallel conditions. Estrone-3-sulfate uptake in the absence of competitor, 4.9 $\pm$ 0.1 pmol•mg cell protein^{-1}•10 min^{-1}, was set at 100%. Each bar

represents the mean ± SEM of triplicate determinations. ***P* < 0.005 versus cells incubated in the absence of competitor.

Figure 10. Uptake of radiolabeled solutes by human OATP2B1 and rat Oatp2b1. COS cells were transiently transfected with (A, B) human OATP2B1 or (C, D) rat Oatp2b1 expression plasmids. The transfected COS cells were incubated for 10 min at 37°C in pH 6.0 buffer with the indicated concentrations of [^{3}H]azithromycin, [^{3}H]clarithromycin, or [^{3}H]estrone-3-sulfate, and then processed to determine cell-associated protein and radioactivity. Each bar represents the mean ± SEM (n = 3). ** *P* < 0.005, versus control plasmid-transfected cells (YFP).

Figure 7

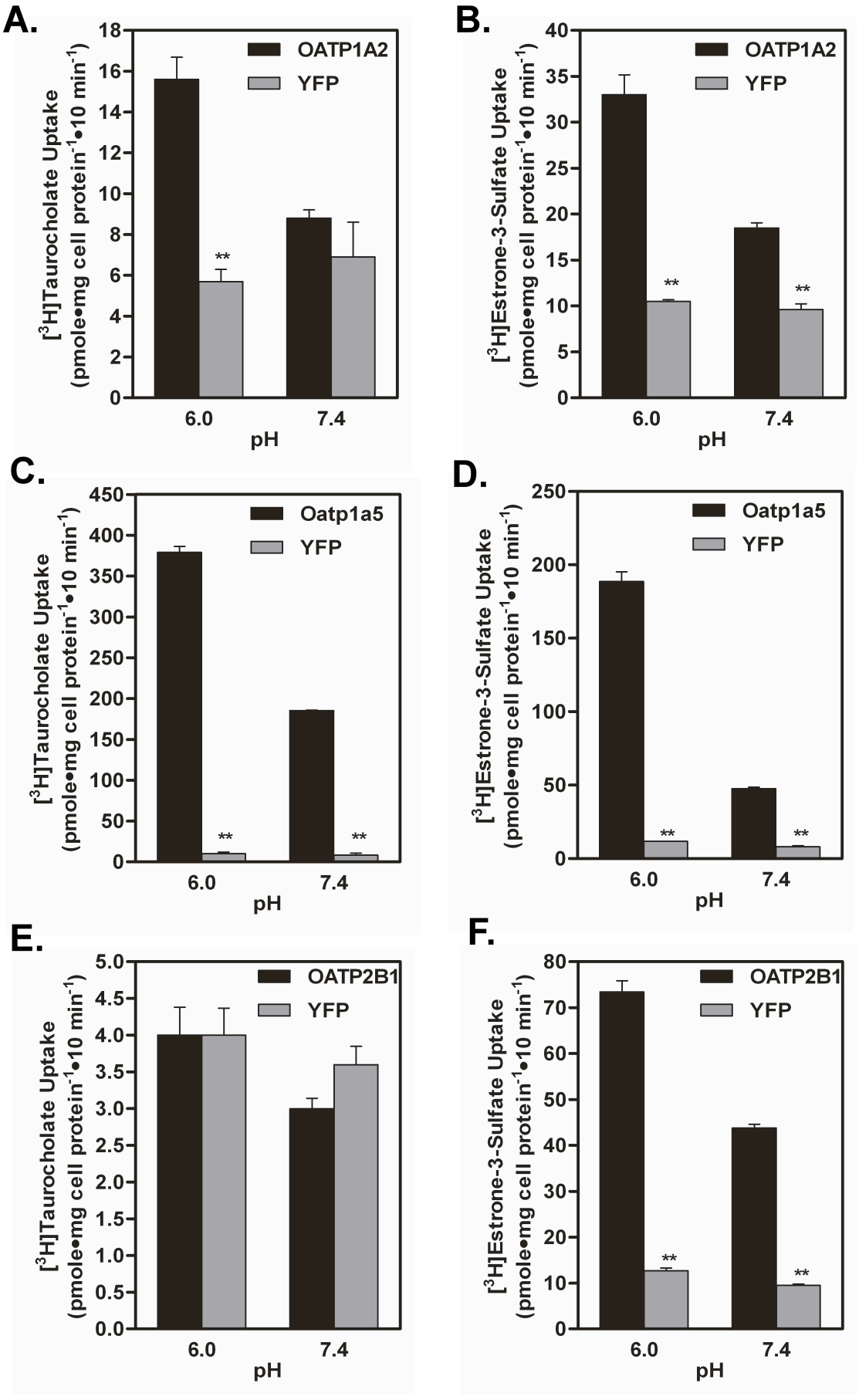

A.
B.
C.
D.
E.
F.
OATP1A2
YFP
Oatp1a5
OATP2B1
[3H]Taurocholate Uptake
(pmole•mg cell protein-1•10 min-1)
[3H]Estrone-3-Sulfate Uptake
(pmole•mg cell protein-1•10 min-1)
pH
6.0
7.4
**

Figure 8

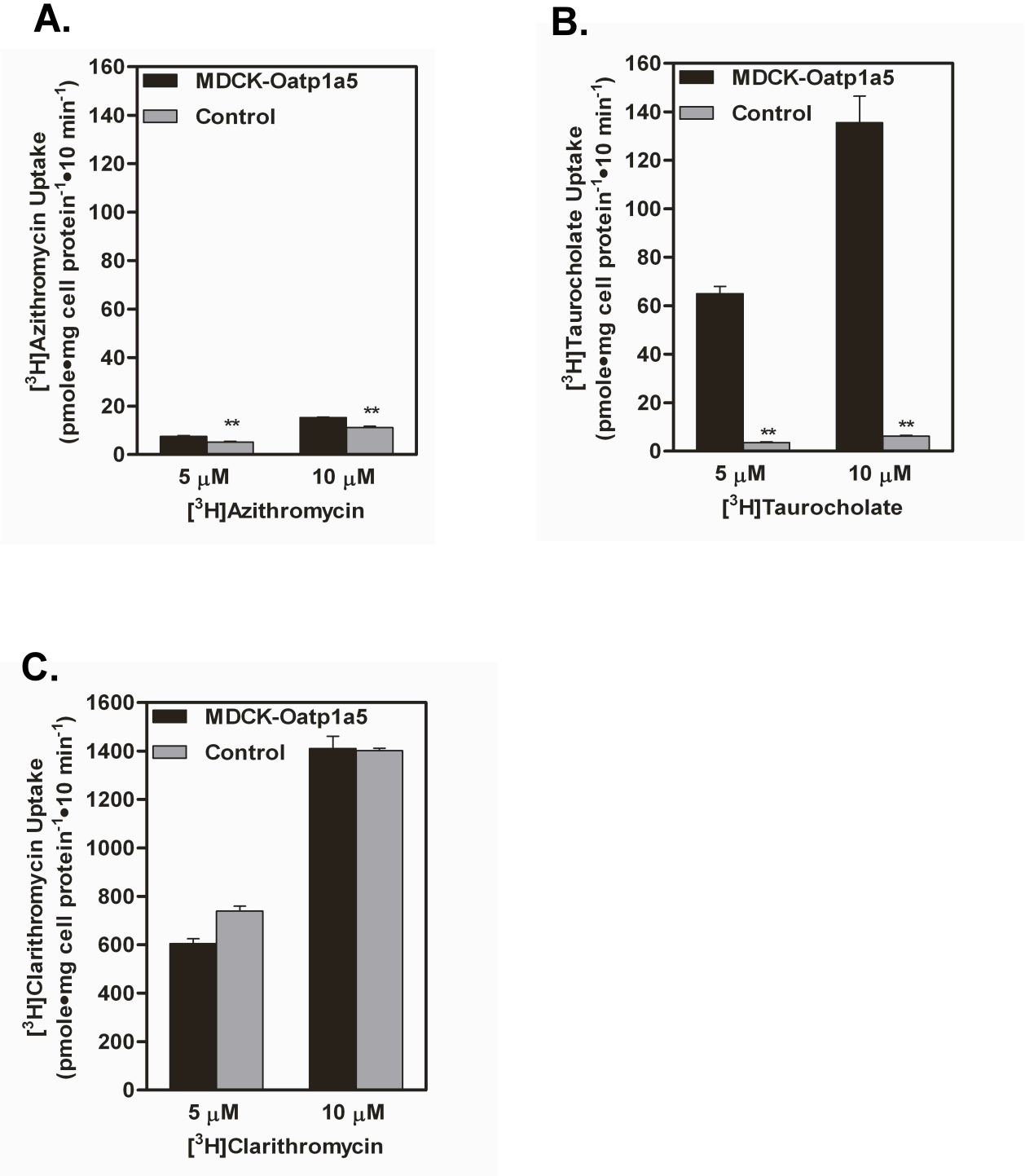

A.
MDCK-Oatp1a5
Control
[3H]Azithromycin Uptake
(pmole•mg cell protein-1•10 min-1)
160
140
120
100
80
60
40
20
0
**
**
5 μM
10 μM
[3H]Azithromycin
B.
MDCK-Oatp1a5
Control
[3H]Taurocholate Uptake
(pmole•mg cell protein-1•10 min-1)
160
140
120
100
80
60
40
20
0
**
**
5 μM
10 μM
[3H]Taurocholate
C.
MDCK-Oatp1a5
Control
[3H]Clarithromycin Uptake
(pmole•mg cell protein-1•10 min-1)
1600
1400
1200
1000
800
600
400
200
0
5 μM
10 μM
[3H]Clarithromycin

Figure 9

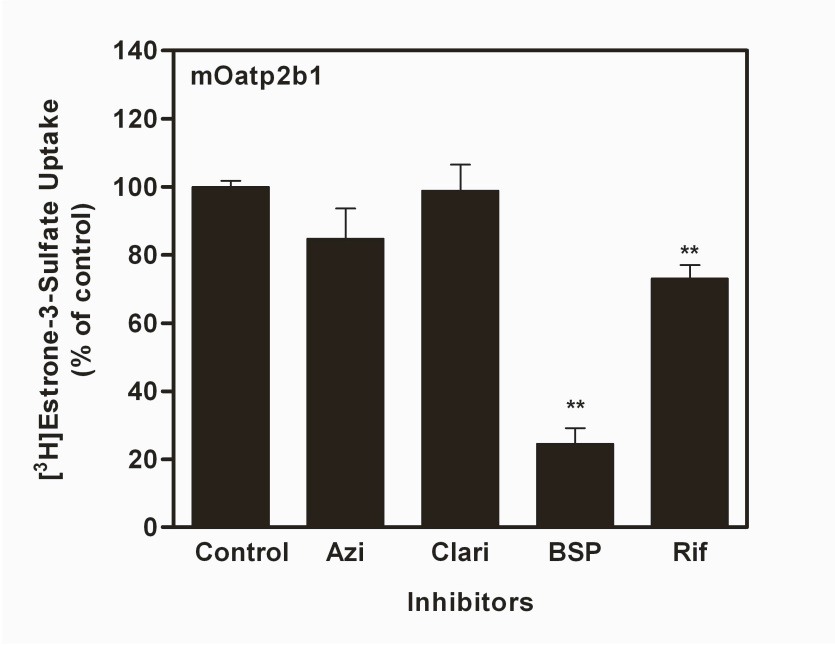
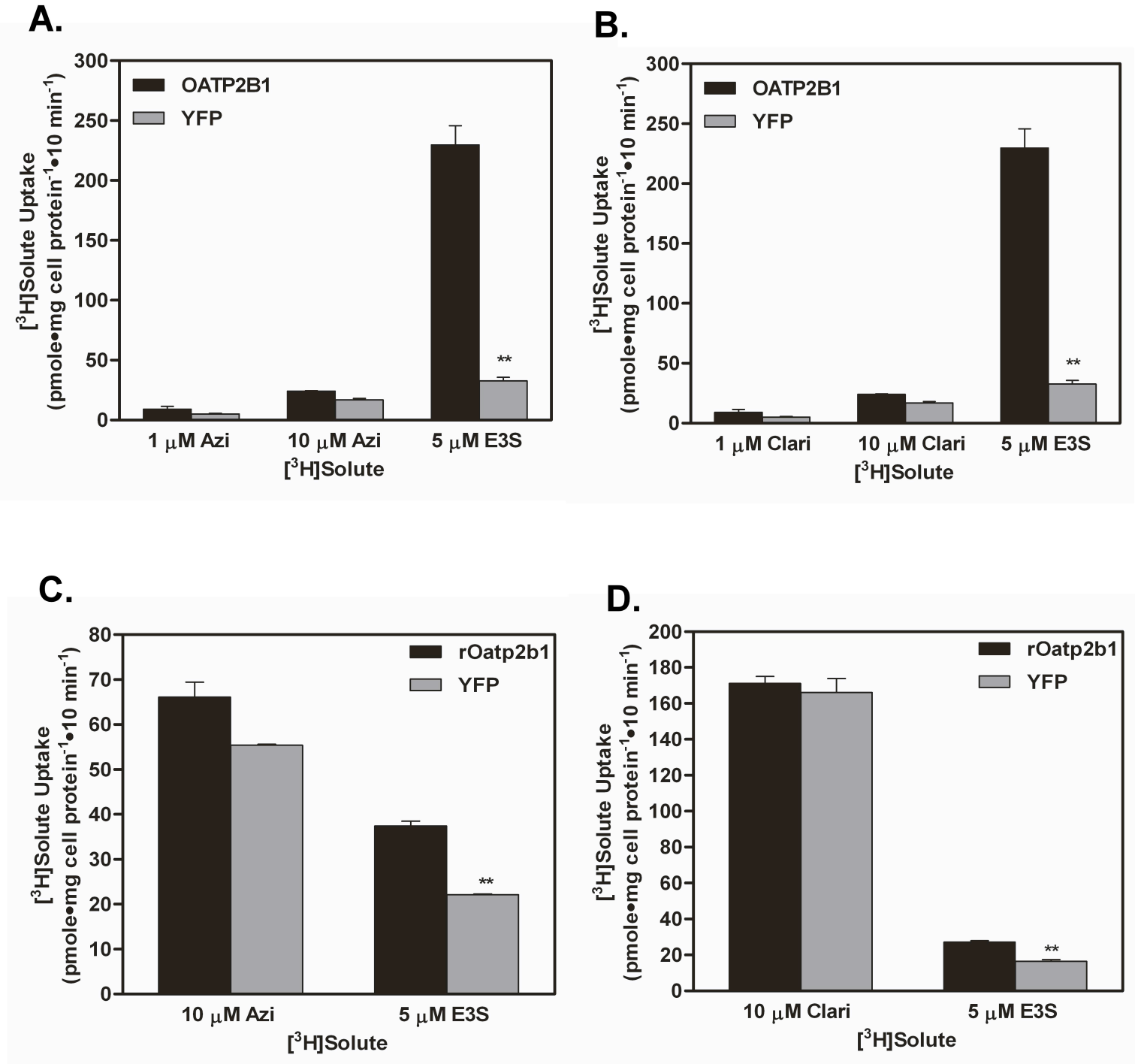

mOatp2b1
[3H]Estrone-3-Sulfate Uptake
(% of control)
140
120
100
80
60
40
20
0
**
**
Control
Azi
Clari
BSP
Rif
Inhibitors

Figure 10


A.
B.
C.
D.
OATP2B1
YFP
rOatp2b1
[3H]Solute Uptake
(pmole•mg cell protein-1•10 min-1)
1 μM Azi
10 μM Azi
5 μM E3S
1 μM Clari
10 μM Clari
[3H]Solute
**