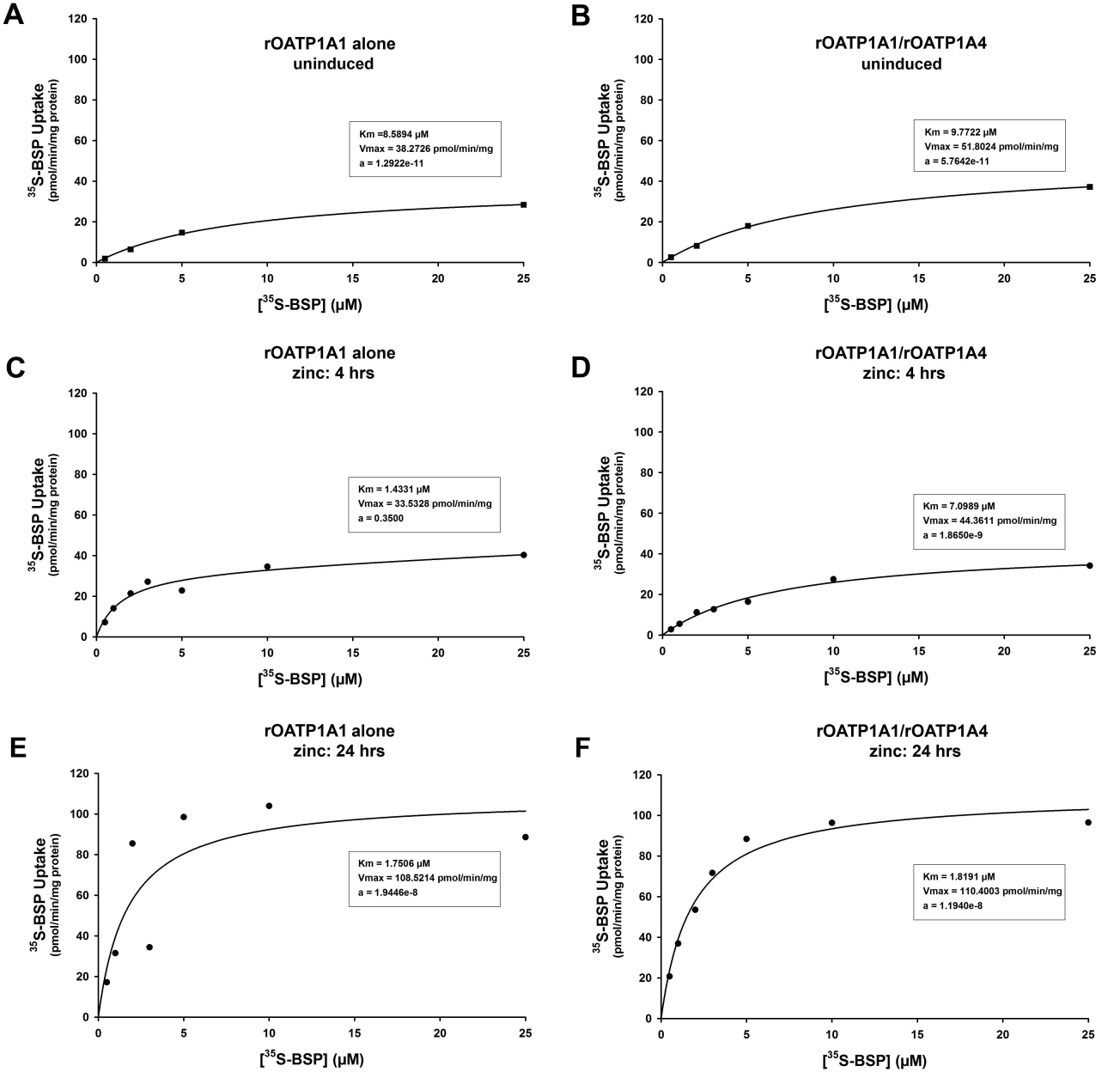
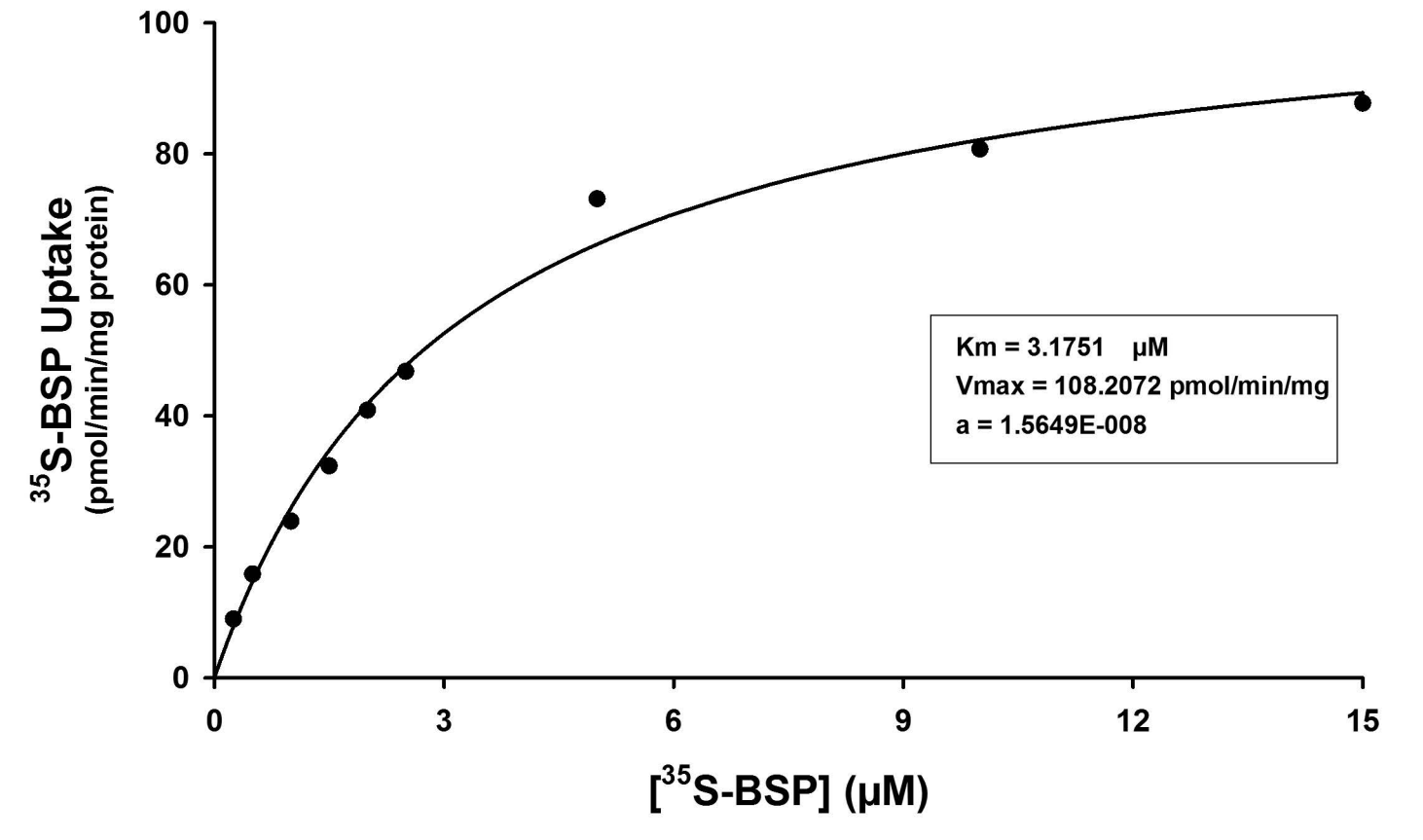
Supplemental Figure 1: Representative saturation curves for ^{35}S-BSP uptake by HeLa cells stably transfected with rOATP1A1, rOATP1A4, or both 4 or 24 hrs after induction of transporter expression or in uninduced controls. Uptake of ^{35}S-BSP was determined as described in Methods for uninduced HeLa cells (panels A and B), and cells incubated with zinc for 4 hrs (C and D) or 24 hrs (E and F). Data were fit to the equation $v = \frac{Vmax[S]}{Km+[S]} + a[S]$ where v is the initial rate of uptake of ^{35}S-BSP, [S] is the concentration of ^{35}S-BSP, and a is a linear term representing non-carrier mediated diffusional uptake as described in Methods. Representative studies are shown and fit parameters are provided in the boxes in each figure. Y-axis scales have been kept constant for all studies. Appropriate protein expression in zinc-induced cells was confirmed by immunoblot.

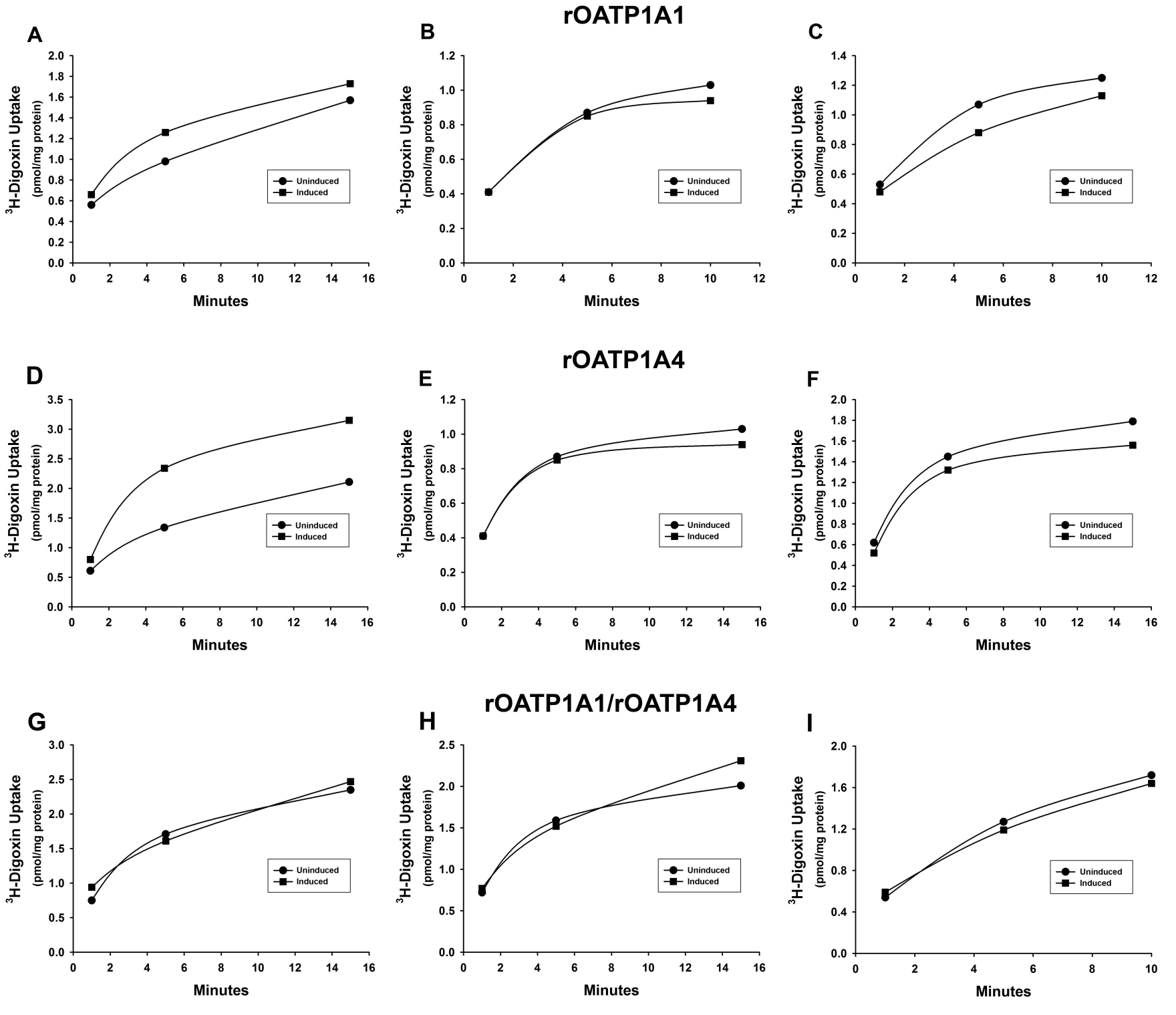
Supplemental Figure 2: Representative saturation study of uptake of ^{35}S-BSP by HEK293 cells transiently transfected with mEGFP-rOATP1A1. Uptake of ^{35}S-BSP was determined as described in Methods. Data were fit to the equation $v = \frac{Vmax[S]}{Km+[S]} + a[S]$ where v is the initial rate of uptake of ^{35}S-BSP, [S] is the concentration of ^{35}S-BSP, and a is a linear term representing non-carrier mediated diffusional uptake as described in Methods. Fit parameters are shown in the box.

Supplemental Figure 3: Time dependent uptake of ^{3}H-digoxin by HeLa cells stably transfected with rOATP1A1, rOATP1A4, or both. Cells were incubated with or without zinc for 24 hrs and uptake over time of 0.1 µM ^{3}H-digoxin was determined as described in Methods. Appropriate protein expression in zinc-induced cells was confirmed by immunoblot. Three representative experiments for each cell line are shown: Panels A-C rOATP1A1; Panels D-F

rOATP1A4; and Panels G-I rOATP1A1 coexpressed with rOATP1A4. Uptake by uninduced cells is represented by circles, and uptake by induced cells is represented by squares.


A
rOATP1A1 alone
uninduced
Km =8.5894 µM
Vmax = 38.2726 pmol/min/mg
a = 1.2922e-11
B
rOATP1A1/rOATP1A4
uninduced
Km = 9.7722 µM
Vmax = 51.8024 pmol/min/mg
a = 5.7642e-11
C
rOATP1A1 alone
zinc: 4 hrs
Km = 1.4331 µM
Vmax = 33.5328 pmol/min/mg
a = 0.3500
D
rOATP1A1/rOATP1A4
zinc: 4 hrs
Km = 7.0989 µM
Vmax = 44.3611 pmol/min/mg
a = 1.8650e-9
E
rOATP1A1 alone
zinc: 24 hrs
Km = 1.7506 µM
Vmax = 108.5214 pmol/min/mg
a = 1.9446e-8
F
rOATP1A1/rOATP1A4
zinc: 24 hrs
Km = 1.8191 µM
Vmax = 110.4003 pmol/min/mg
a = 1.1940e-8
35S-BSP Uptake
(pmol/min/mg protein)
[35S-BSP] (µM)


100
80
60
40
20
0
^{35}S-BSP Uptake
(pmol/min/mg protein)
0
3
6
9
12
15
[^{35}S-BSP] (μM)
Km = 3.1751 μM
Vmax = 108.2072 pmol/min/mg
a = 1.5649E-008


rOATP1A1
rOATP1A4
rOATP1A1/rOATP1A4
A
B
C
D
E
F
G
H
I
^{3}H-Digoxin Uptake
(pmol/mg protein)
Minutes
Uninduced
Induced