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FOOTNOTE

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Send reprint requests to: Tsuyoshi Yokoi, Ph.D. Faculty of Pharmaceutical Sciences, Kanazawa University, Kakuma-machi, Kanazawa 920-1192, Japan.

E-mail: tyokoi@kenroku.kanazawa-u.ac.jp

FIGURE LEGENDS

Fig. 1. CYP3A4 enzyme activity in various cell lines infected with AdCYP3A4. Cells were infected with AdCYP3A4 at MOI 10 for 48 hrs, and the testosterone 6 β -hydroxylase activity was measured as described in materials and methods. Data are mean of two independent experiments.

Fig. 2. Cytotoxic effects of CYP3A4 expression on cell viability of HepG2 cells treated with various drugs. HepG2 cells were infected with AdCYP3A4 (●) or AdGFP (○) at MOI 10 for 48 hrs, and treated with 23 drugs for 24 hrs. Cell viability was measured by WST-8 assay. Each point represents mean \pm SD (n = 3). * P < 0.05, ** P < 0.01, and *** P < 0.001 compared with the AdGFP group at each concentration of the drug.

Fig. 3. Expression level of (A) Nrf2 mRNA and (B) protein, and (C) testosterone 6 β -hydroxylase activity in AdCYP3A4-infected HepG2 cells with siNrf2. After HepG2 cells were transfected with siNrf2 or siScramble at 10 nM followed by the infection with AdCYP3A4 or AdGFP at MOI 10 for 48 hrs, the expression level of Nrf2 mRNA and protein, and testosterone 6 β -hydroxylase activity were measured as described in materials and methods. Each column represents mean \pm SD (n = 3). *** P < 0.001 compared with AdCYP3A4-infected cells with siScramble.

Fig. 4. Effects of the decreased level of Nrf2 on cell viability of CYP3A4-expressing HepG2 cells treated with the drugs. HepG2 cells were transfected with siNrf2 (▲) or siScramble (△) at 10 nM for 24 hrs following by the infection with AdCYP3A4 at MOI

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10 for 48 hrs. After cells were treated with 6 drugs for 24 hrs, (A) WST-8 and (B) ATP assays were performed for evaluation of the cell viability. Each point represents mean \pm SD (n = 3). * $P < 0.05$, ** $P < 0.01$ and *** $P < 0.001$ compared with AdCYP3A4-infected cells with siScramble in each concentration of drug.

Fig. 1.

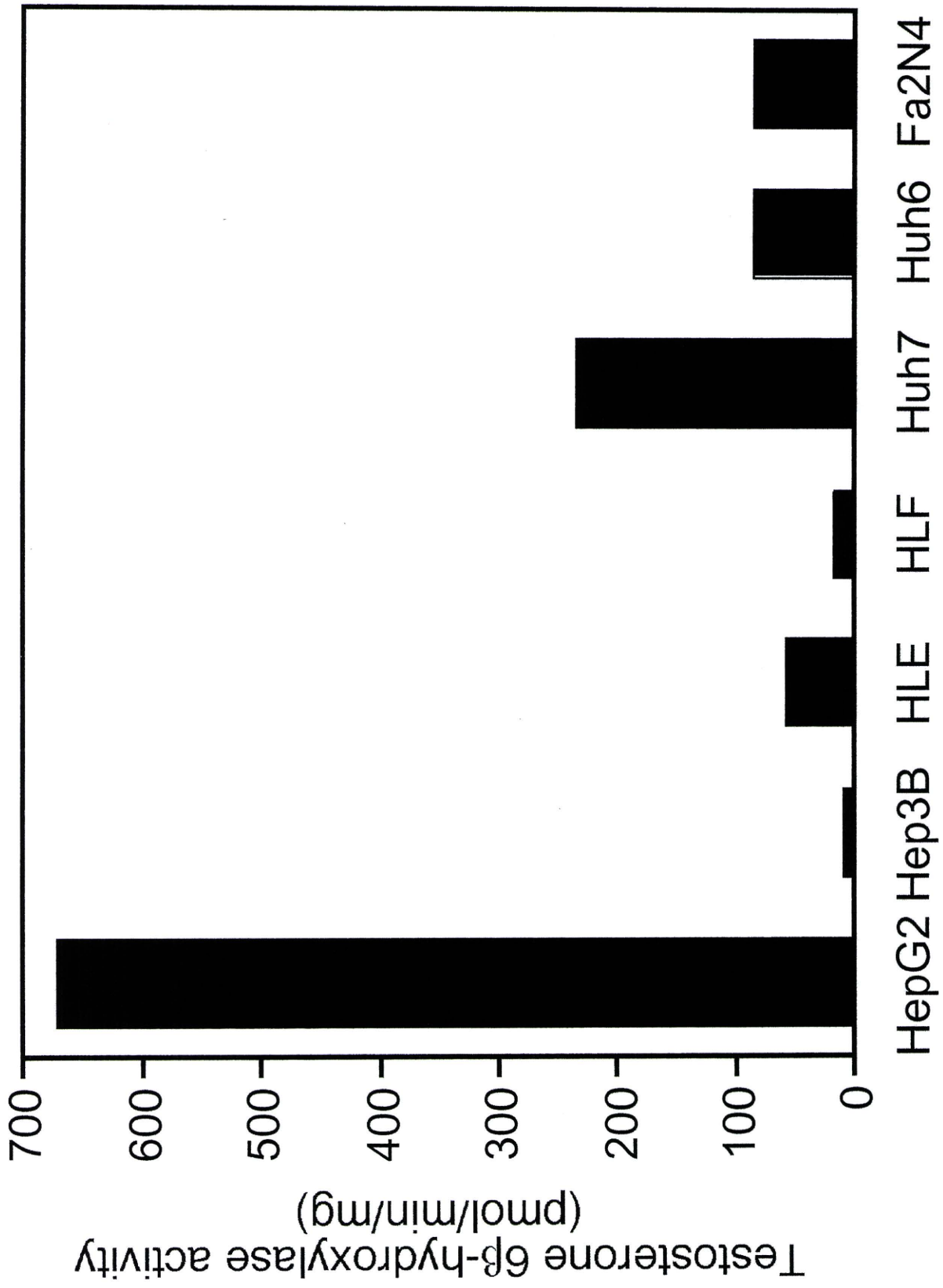


Fig. 2.

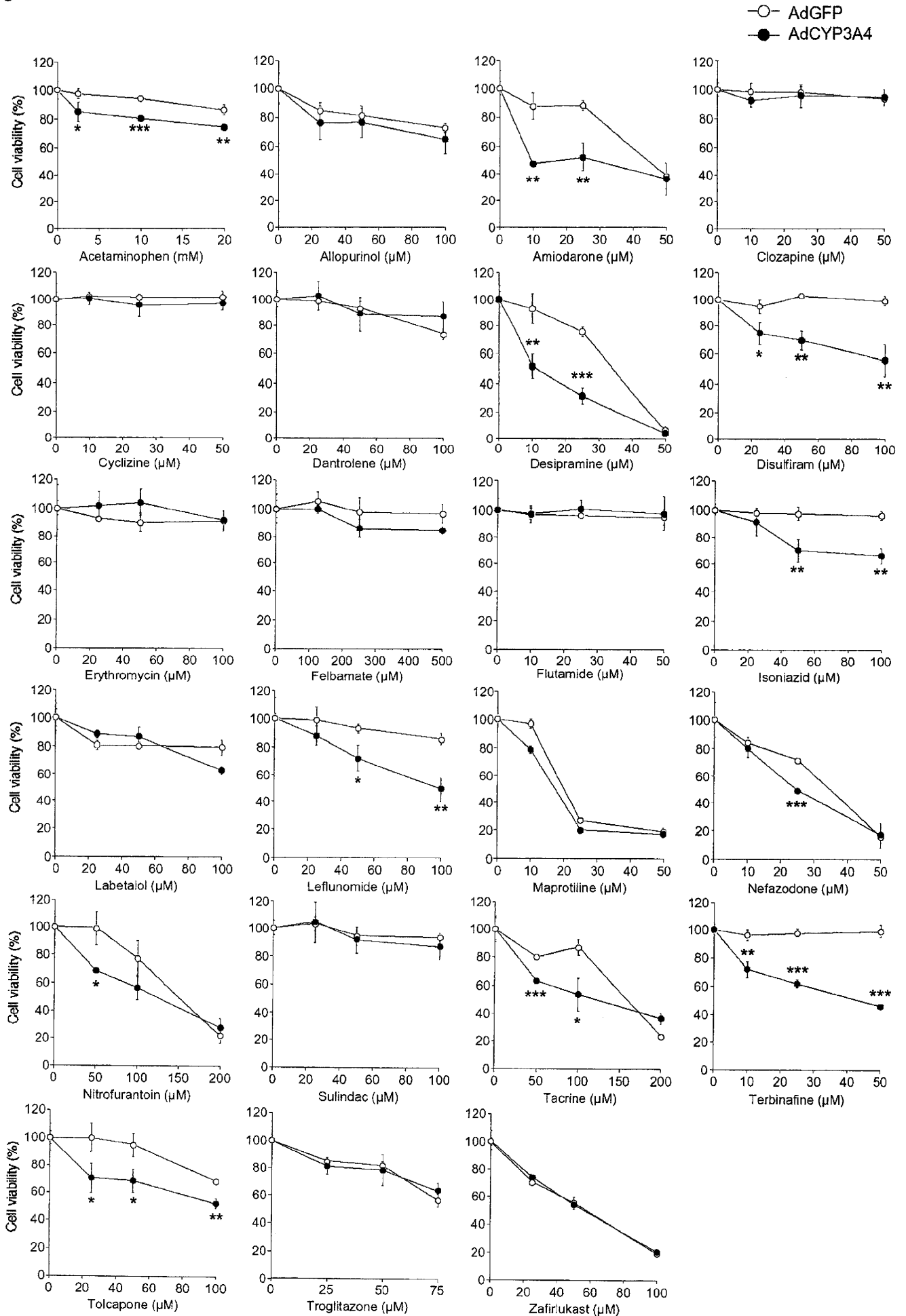
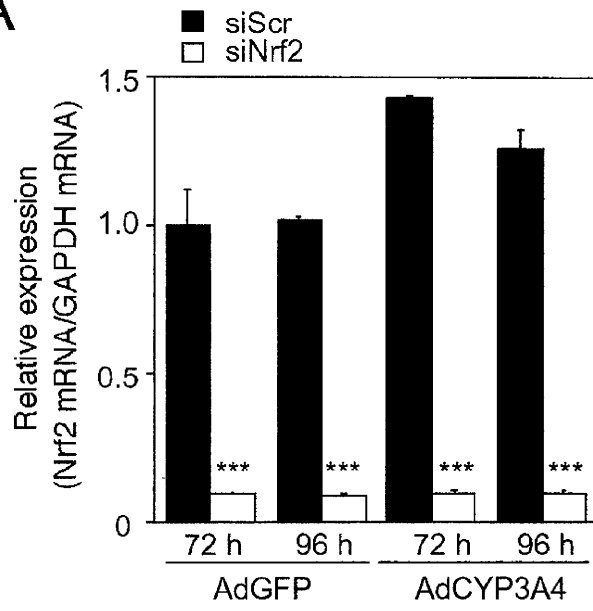
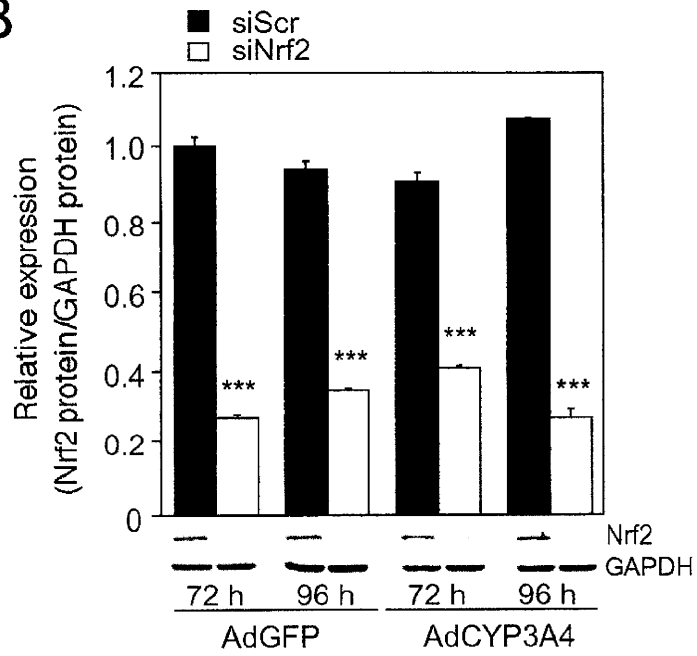


Fig. 3

A



B



C

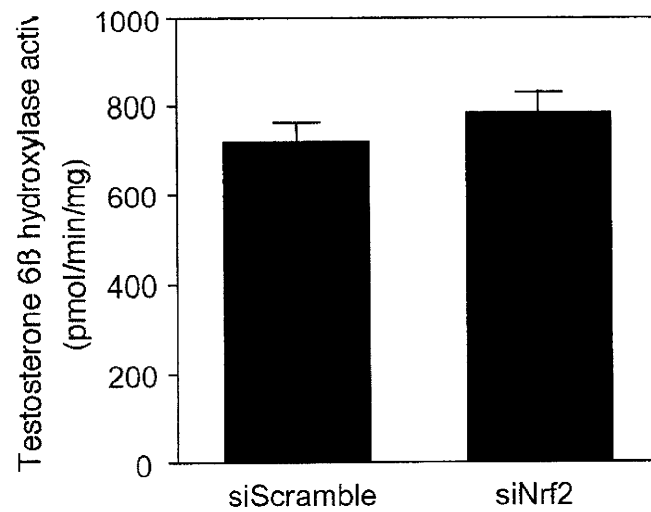
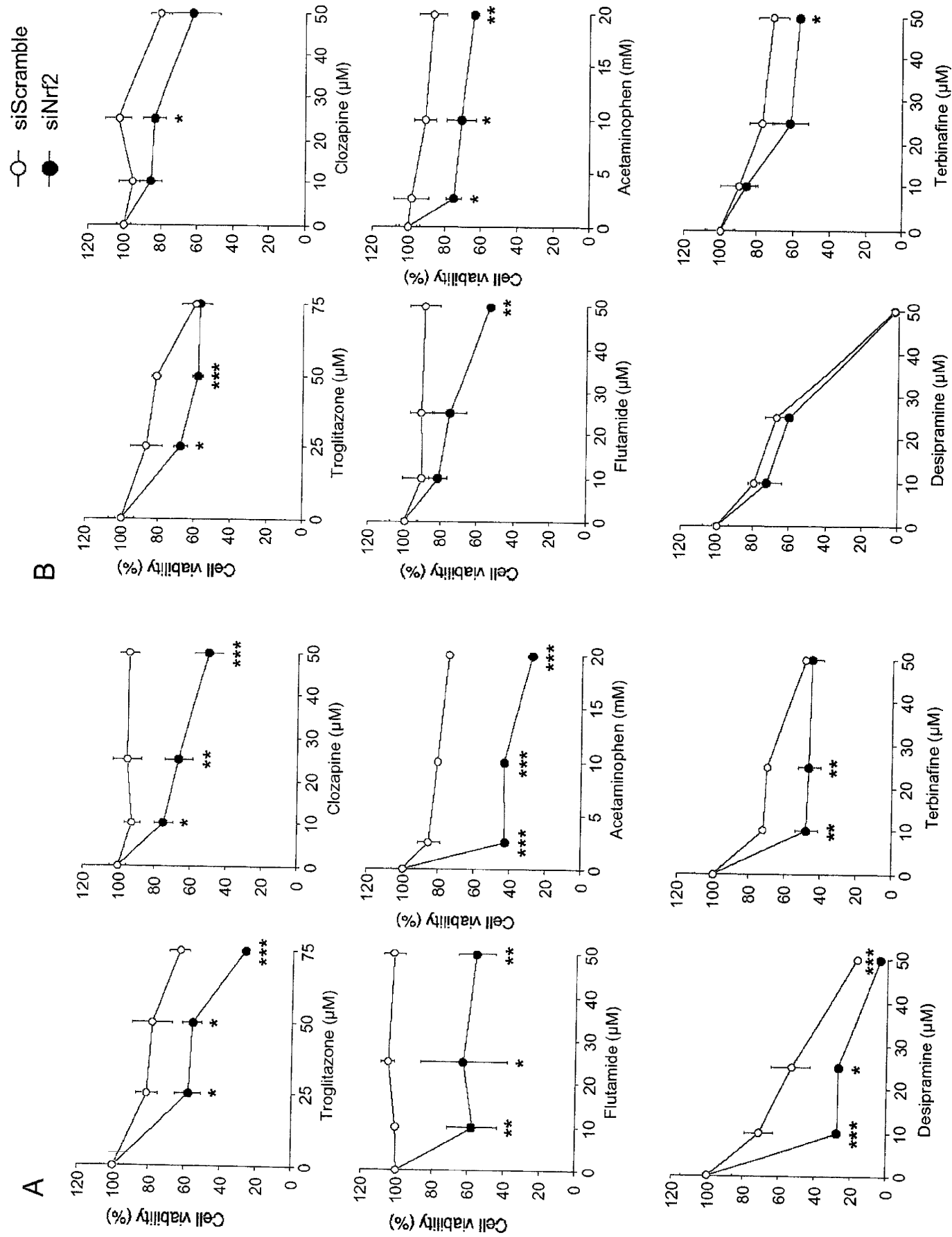


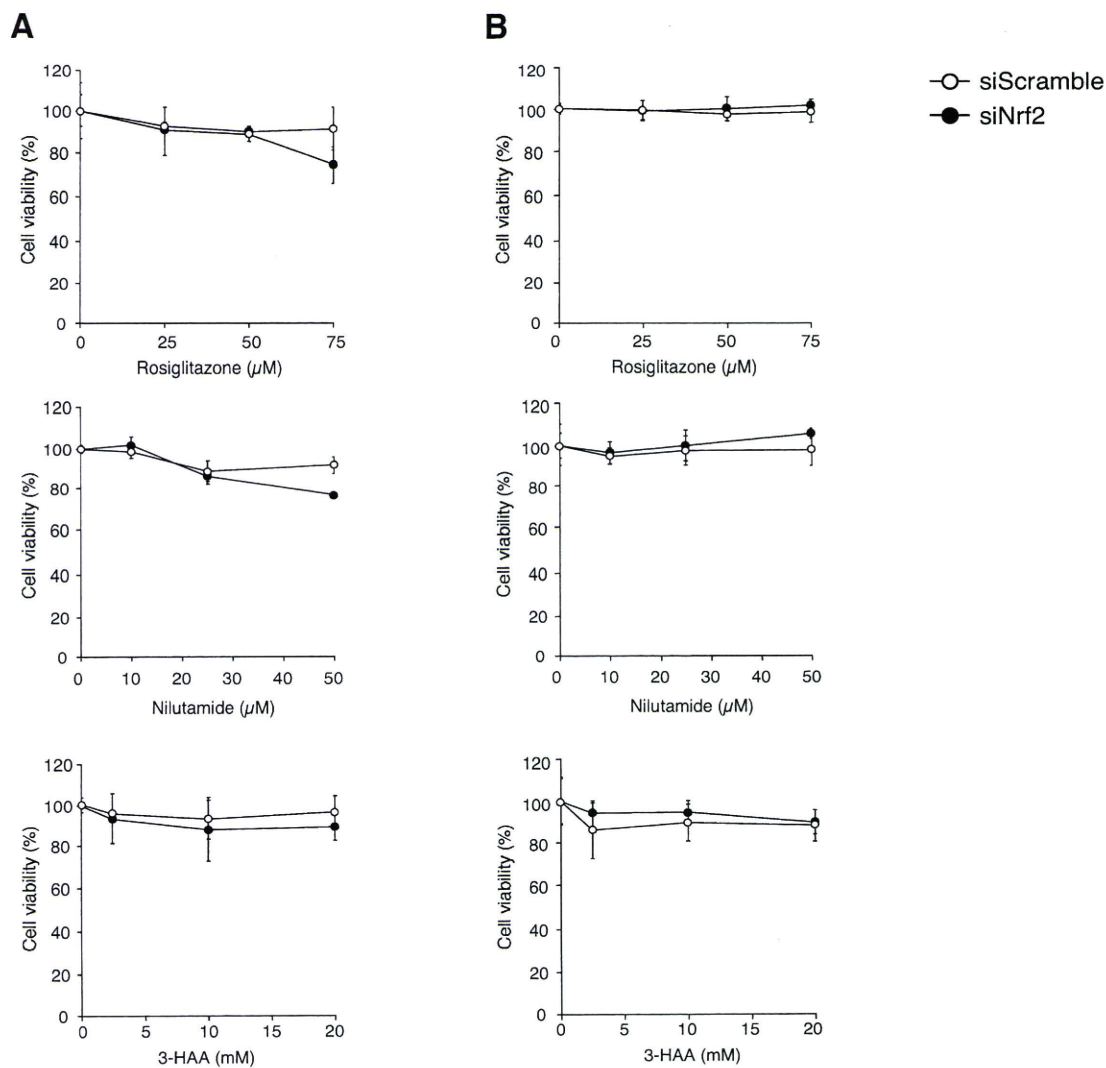
Fig. 4.



Development of A High-sensitive Cytotoxicity Assay System for CYP3A4-mediated Metabolic Activation

Hiroko Hosomi, Tatsuki Fukami, Atsushi Iwamura, Miki Nakajima, and Tsuyoshi Yokoi

Drug Metab Dispos



Supplement Fig. S1: Effects of CYP3A4 expression and the decreased level of Nrf2 on cell viability of HepG2 cells treated with rosiglitazone, nilutamide, and 3-hydroxyacetanilide. HepG2 cells were transfected with siNrf2 (closed triangle) and siScramble (open triangle) at 10 nM for 24 hrs following by the infection with AdCYP3A4 at MOI 10 for 2 days. After cells were treated with drugs, (A) WST-8 and (B) ATP assays were performed for the evaluation of cell viability. Each data point represents mean \pm SD ($n = 3$).

