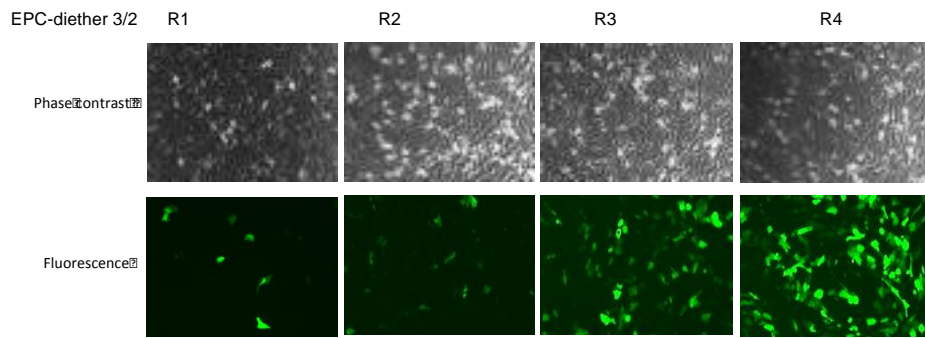
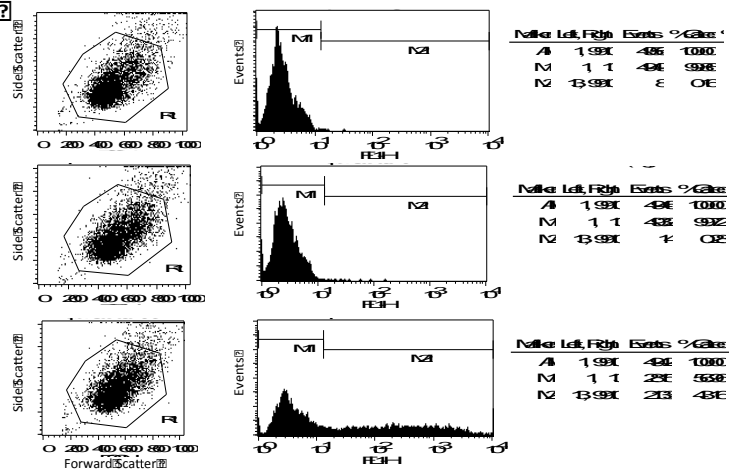


**Supporting Figure 2: Transient transfection of progenitor HepaRG cells using EPC/diether-based liposomes.** The liposomes of EPC and diether-NH<sub>2</sub> (3/2, 5/2 and 1/2, wt/wt) and the reagents Lipofectamine®, FreeStyle™ MAX and MACSfectin® were used to transfect the pmaxGFP plasmid into progenitor HepaRG cells with 4 different charge ratios (*R*). The transfection efficiency was monitored by visualizing the percentage of GFP positive cells in fluorescence microscopy (A, C-F: fluorescence and phase contrast microscopy) using EPC/diether-NH<sub>2</sub> 3/2 liposomes (A) compared to untransfected cells (C, control) and cells transfected with the Lipofectamine® (D), FreeStyle™ MAX (E) and MACSfectin® (F). Percentages of positive cells and means of fluorescence were quantified by flow cytometry (B, example of the efficient transfection using the Egg-PC/diether-NH<sub>2</sub> 3/2 liposomes).

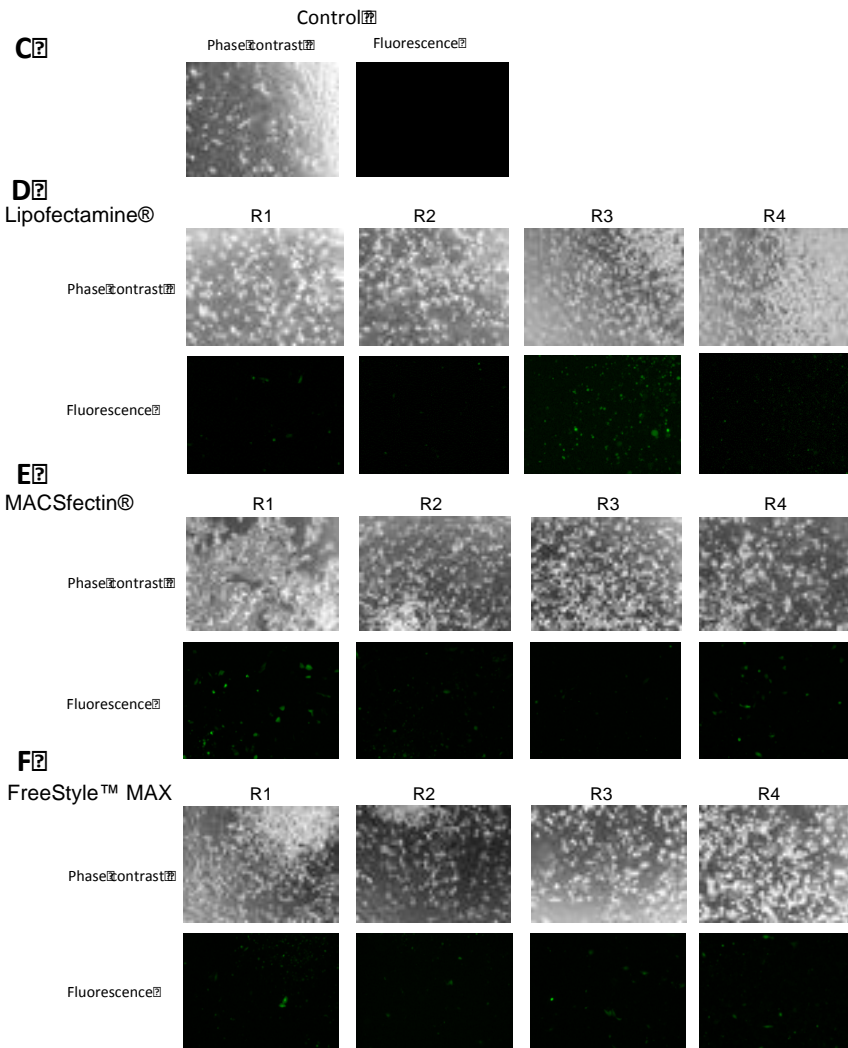
**A**



**B**

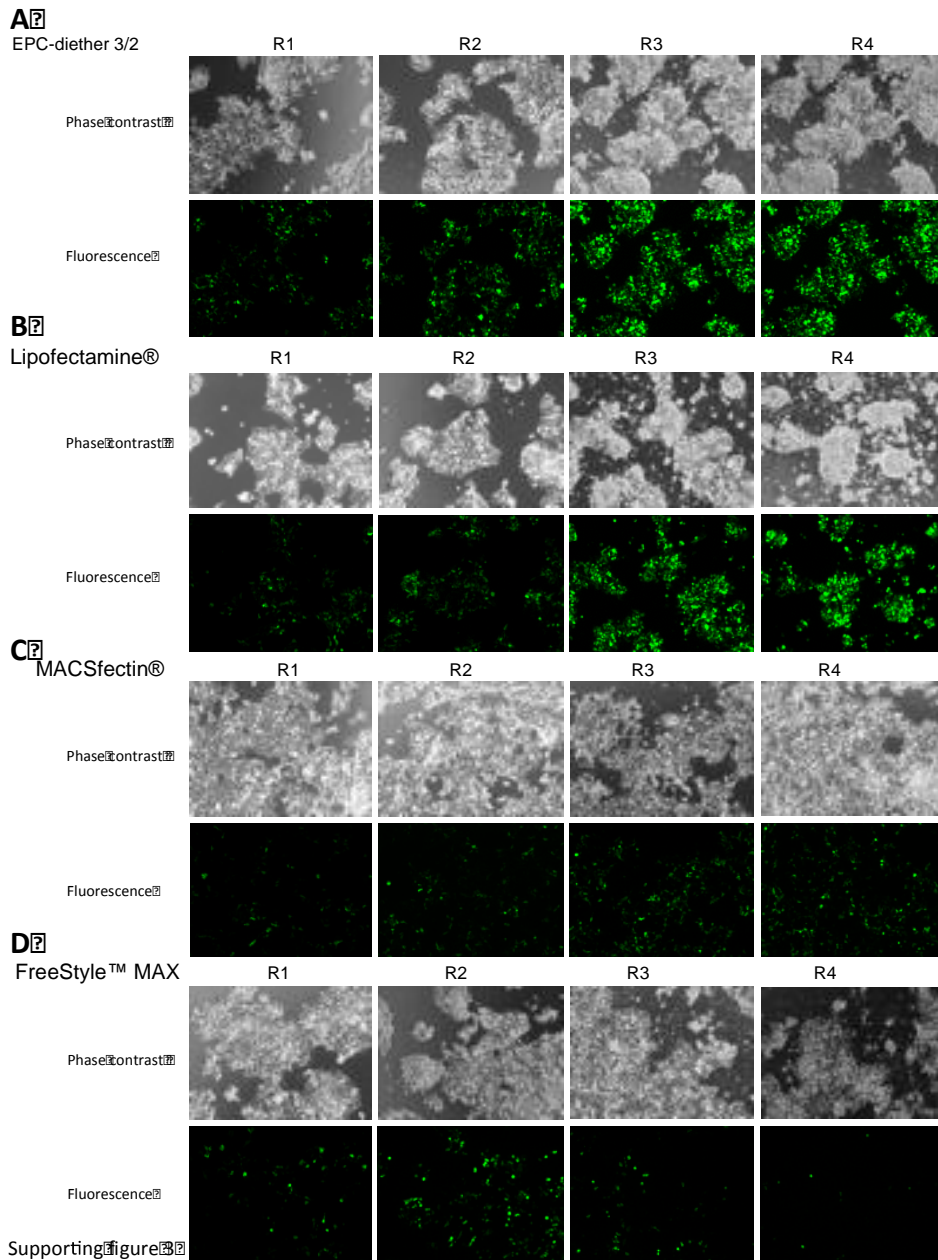


Supporting Figure 2A-B

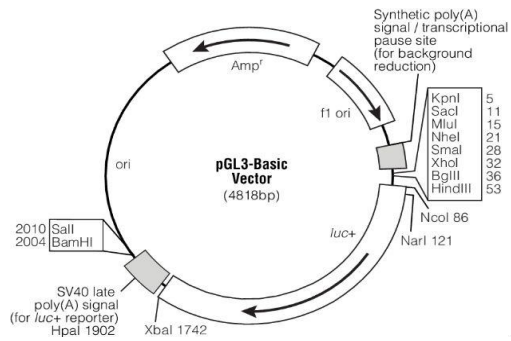


Supporting Figure 3C-F

**Supporting Figure 3: Transient transfection of HEK293T cells using EPC/diether-based liposomes.** The EPC and diether-NH<sub>2</sub> 3/2 liposomes and the reagents Lipofectamine®, FreeStyle™ MAX and MACSfectin® were used to transfect the pmaxGFP plasmid into HEK293T cells with 4 different charge ratios (*R*). The transfection efficiency was monitored by visualizing the percentage of GFP positive cells in fluorescence and contrast microscopy using EPC/diether-NH<sub>2</sub> (3/2 wt/wt) liposomes (A) compared to cells transfected with the Lipofectamine® (B), FreeStyle™ MAX (C) and MACSfectin® (D).



**Supporting Figure 4:** Schematic representation of the XRE-pGL3 biosensor plasmid. The XRE-responsive element (sequence: ttctcacgcaacgccgcgggcgcaggcaagctcttctcacgcgagct) has been subcloned in pGL3 vector using the KpnI (5' end) and SacI (3' end) restriction sites.



..GGTACCGAGCTCTTACGCGTGCTAGCCCGGGCTCGAGATCT ...

          KpnI      SacI  SmaI

X R E - r e s p o n s i v e e l e m e n t  
 (TTCTCACGCAACGCCGCGGCGCAGGCAAGCTTCTCACGCGAGCT) has been subcloned in  
 pGL3 vector using the KpnI (GGTACC, 5' end) and SacI (GAGCTC, 3' end) restriction sites.

Partial sequencing of the XRE-pGL3 biosensor plasmid using the Rvprimer 3 :  
 TTTCTCTATCGATAGGTACCTTCTCACGCAACGCCGCGGCGCAGGCAAGCTCTTCTCACGCGA  
GCTCTTACGCGTGCTAGCCCGGGCTCGAGATCTGCGATCT  
 The underlined motifs correspond to KpnI and SacI, respectively.

Supporting figure 4