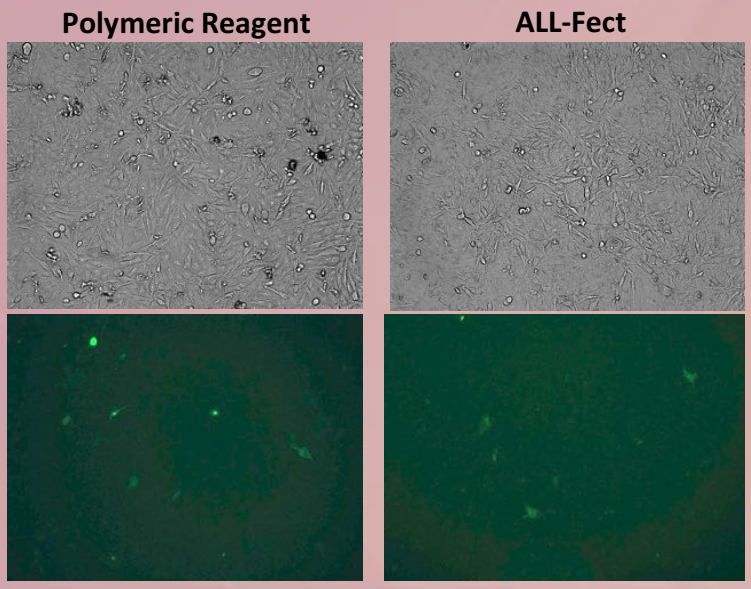
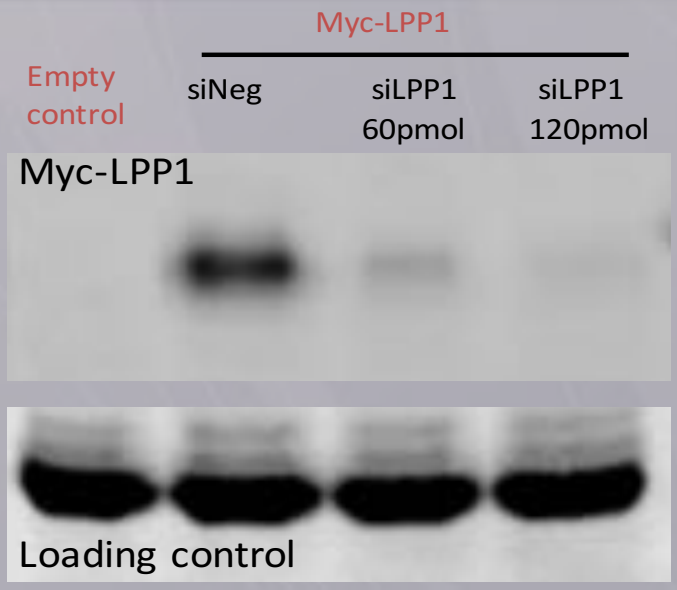
Transfecting Triple-Negative Breast Cancer MDA-MB-231 Cells with Plasmid DNA and siRNA by using ALL-Fect and Prime-Fect



Phase Contrast (top) and Fluorescence Microscopy (bottom) pictures of breast cancer cells transfected with a leading polymeric reagent and ALL-Fect. A leading polymeric transfection reagent was used on the left side while ALL-Fect was used on the right side. In each case, 1 μg of plasmid DNA coding for an EGFP gene was delivered with an optimal ratio of transfection reagents and cell analysed after 48 hours. Note the relatively more biocompatible nature of the ALL-Fect (from phase contrast analysis) and equivalent GFP expression in the cells by both reagents.

Western Blot analysis of breast cancer cells transfected with siRNA/Prime-Fect complexes. A specific siRNA against LPP1 (Lipid Phosphate Phosphohydrolase Type I) was formulated with Prime-Fect and added to the cells at 60 and 120 pmol (cells treated in 6-well plates; complexes prepared with 4.2 μL Prime-Fect and the indicated amount of siRNA). After 48 hours, the levels of the targeted protein was analysed by the western blotting. Note that a negative control (non-specific) siRNA did not affect the level of LPP1, while the protein levels were extinguished with the specific siRNAs delivered by using Prime-Fect. The loading was equivalent in each lane (lower gel).



| Data courtesy of X. Tang, University of Alberta (Canada)

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