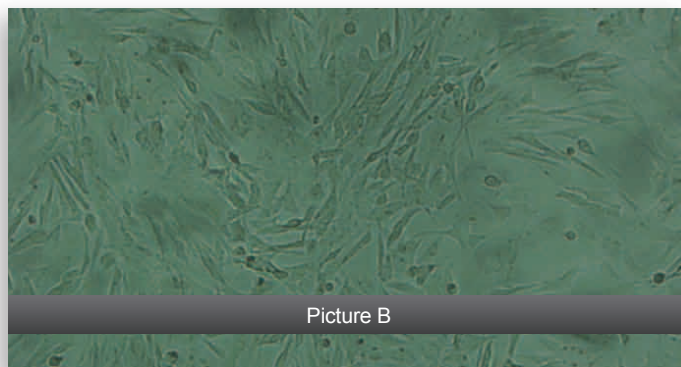
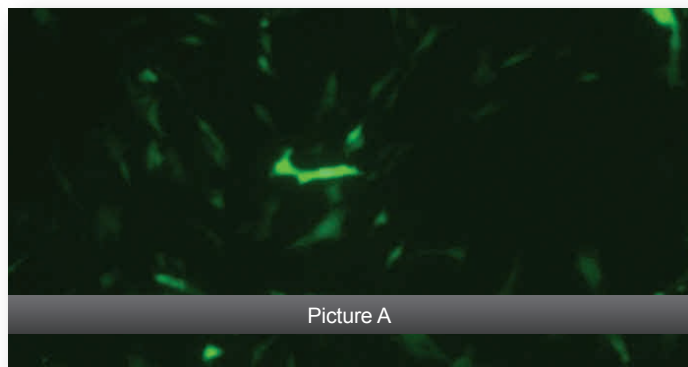


## DIFFERENTIATED SHYSY5Y CELLS



SHYSY5Y Cells were transfected in a Costar® 24-well tissue culture treated plate using the magnefect-nano™ transfection system (24-well plate magnet) with 1.2 µl OZ Biosciences Polymag and 1.2 µg of a plasmid encoding EGFP per well and then differentiated. 24 hours post-transfection, the cells were analysed by fluorescence microscopy (A) and light microscopy (B).

### CELL SEEDING PARAMETERS

**Plate type:** Costar® 24-well plate (tissue culture treated)  
**Cell seeding density:** 12 x10<sup>4</sup> cells/well  
**Cell seeding volume:** 600 µl  
**Cell seeding time:** 24 hours prior to transfection  
**Serum starve:** No

### MAGNEFACT-NANO™ PARAMETERS

**Frequency:** 2 Hz  
**Displacement:** 0.2 mm  
**Time:** 30 minutes (3600 cycles)

### DIFFERENTIATION

To differentiate add 10 µM all trans-retinoic acid per well and change 50% media every 2-3 days for 6 days. Cells are fully differentiated by day 7.

### TRANSFECTION COMPLEX

(see magnefect-nano™ protocol for more details)

**Transfection reagent:** Oz Biosciences Polymag  
**Transfection reagent (volume/well):** 1.2 µl  
**DNA (mass/well):** 1.2 µg  
**Transfection medium:** Complete MEM: Ham's F12 (1:1)  
**Transfection volume:** 600 µl  
**Medium change after transfection:** Yes, replace with 600 µl fresh medium containing 10 µM retinoic acid

### CELL INFORMATION

**Cell type:** SHYSY5Y (adherent)  
**Species:** Human  
**Tissue origin:** Thrice-cloned sub-line of bone marrow biopsy-derived line SK-N-SH  
**Morphology:** Neuroblast  
**Medium:** Complete MEM: Ham's F12 (1:1)  
**Culture condition:** Temperature, 37°C; Atmosphere: 95% air, 5% CO<sub>2</sub>

Start with undifferentiated SHYSY5Y cells, go through transfection protocol and then follow differentiation instructions.