# MA NETIS TION WITH NANOSHUTTLE-PL

NanoShuttle-PL is a nanoparticle assembly (~50 nm) consisting of biocompatible components: gold, iron oxide, and Poly-L-Lysine (PLL). Although NanoShuttle-PL is not itself an FDA-approved product for use in humans, the constituent components are themselves biocompatible.

The cells are magnetised by electrostatically attaching small amounts of NanoShuttle-PL non-specifically to cell membranes via PLL at a concentration of around 50 pg/cell. Magnetised cells will appear peppered with dark nanoparticles after incubation, giving a speckled appearance. A small magnetic force of 30 pN/cell is enough to levitate and assemble cells without causing any harm.

## NANOSHUTTLE-PL - THE BIOCOMPATIBILITY

- **Will not affect proliferation, viability, metabolism, inflammatory or oxidative stress, phenotype and/ or other cell functions**
- **Does not bind any specific receptors, works with all cell types**
- **Will release from the cell over 7-8 days into the surrounding extracellular matrix**
- **Does not cause any chromosomal abnormalities in cells and does not lead to genomic instability**

### GO DEEPER!

Find detailed information in the related Whitepaper at our Download Center.