

COSFect - Results

COSFect is a high efficiency transfection reagent specifically developed for COS cell lines. **COSFect** is a lipid-based reagent based on the Tee-Technology ("Triggered Endosomal Escape"). The cationic design of **COSFect** reagent allows high nucleic acid compaction for an efficient transport into COS cells. This reagent is composed by biodegradable lipids leading to high viability and is ready-to-use.

COSFect Benefits:

- Highly efficient with COS cell lines
- Ready-to-use: no need for additional buffer
- Low nucleic acid amount - minimized toxicity
- High level of nucleic acid compaction
- Easy and straightforward protocol
- Compatible with any culture medium: medium changed not required

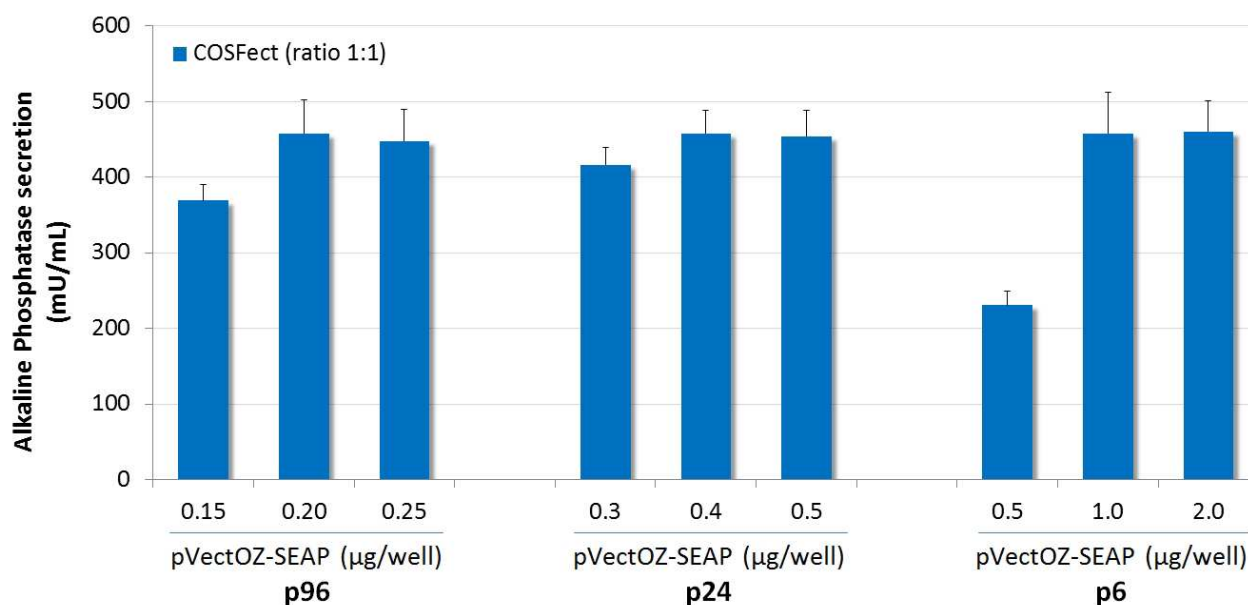
Applications

COSFect has been developed specifically for nucleic acids transfection into COS lineages. This transfection reagent is serum compatible and is used for transient as well as stable transfection. This product is very stable, ready-to-use and intended for research purpose only.

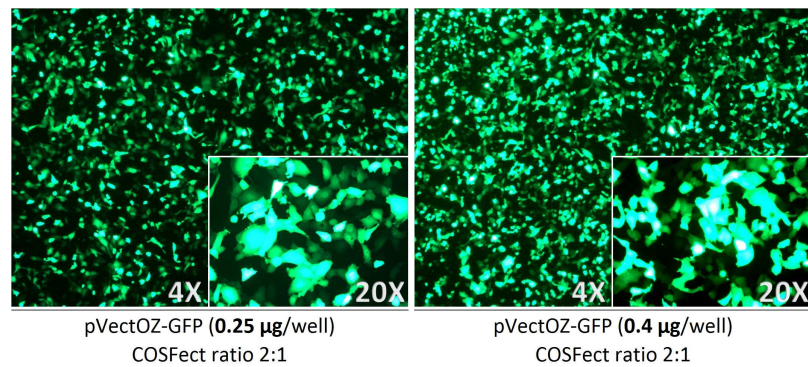
COSFect optimization in 96-, 24- and 6-well plates

COSFect transfection reagent optimization in 96-, 24- and 6-well plates.

Several amounts of pVectOZ-SEAP were complexed with COSFect at a 2:1 ratio. After 20 min of incubation at room temperature, complexes were added onto COS-7 in a dropwise manner. 24 H after, secreted alkaline phosphatase was measured in the cell supernatants.



0.25 and 0.40 µg pVectOZ-GFP were complexed with COSFect at a 2:1 ratio. After 20 min of incubation at room temperature, complexes were added onto the cells in a 24-well plate in a dropwise manner. 24 h after, transfection efficiency was visualized by fluorescent microscopy.



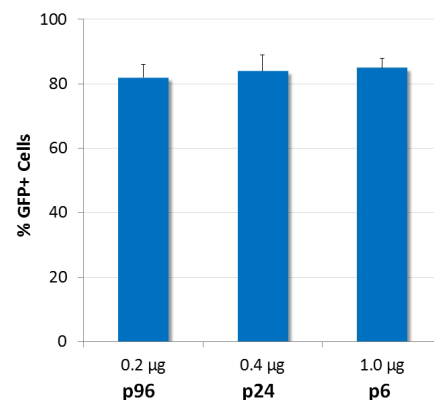
Results show the transfection efficiency using COSFect and low amounts of DNA.

COSFect Efficiency

COSFect efficiency in COS-7 cell line: between 80 and 90% efficiency.

0.2, 0.4 and 1.0 µg pVectOZ-GFP were complexed with COSFect at a 2:1 ratio and added to cells seeded in 96-, 24- and 6-well plates respectively. 24H after, transfection efficiency was measured FACS analysis.

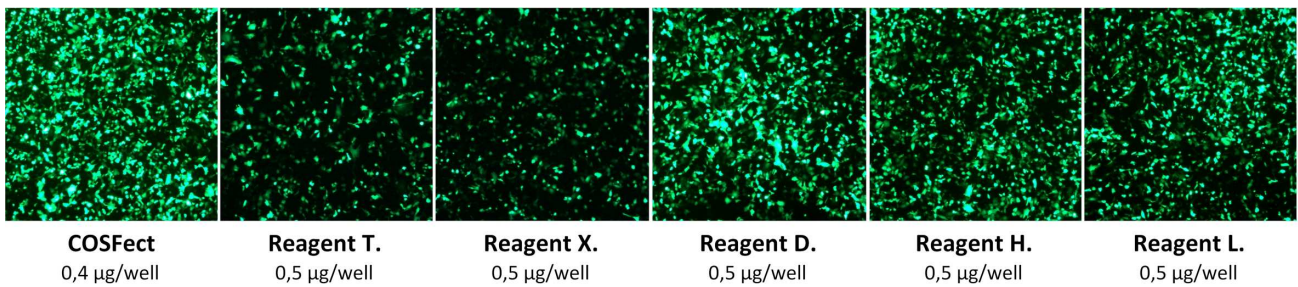
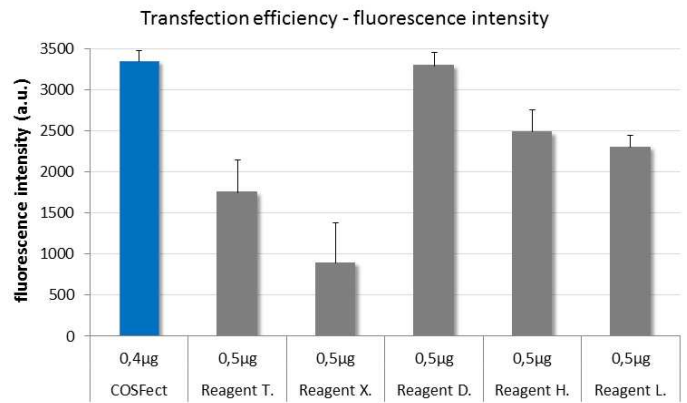
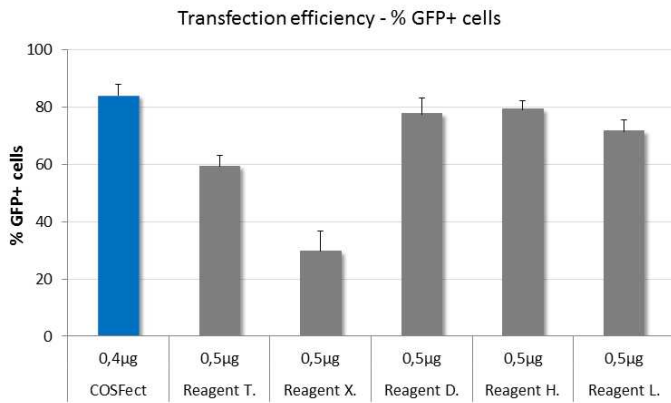
Results demonstrate that 80-90% efficiency can be reached in any cell culture format.



COSFect: comparison with other reagents

COSFect transfection reagent is highly efficient.

Complexes of DNA and COSFect were prepared as previously described (0.4 µg per well in a 24-well plate/ ratio 2:1) and DNA transfection with other commercial transfection reagents was performed as recommended by the manufacturers (0.5µg / recommended ratios). 24 H after, transfection efficiency was measured by fluorescence microscopy and FACS analysis.

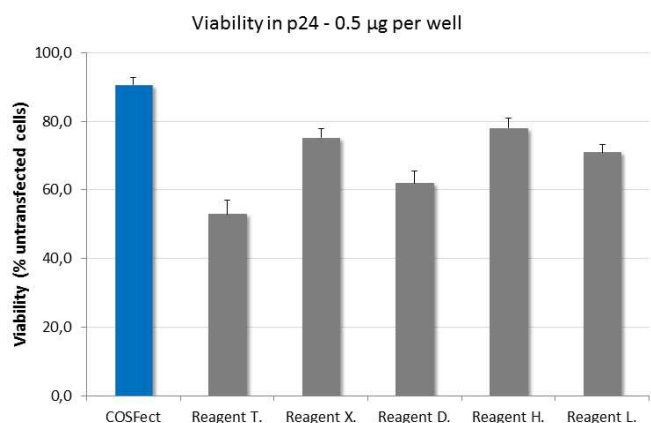
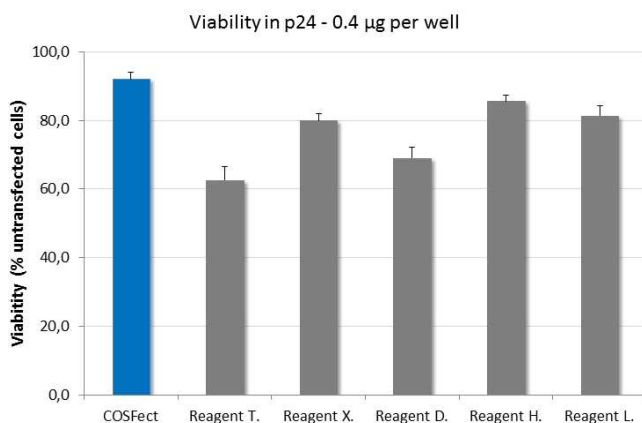


Results show that COSFect enables to transfect cells with high efficiency while using less DNA quantities when compared to other commercial transfection reagents.

COSFect does not hamper cell viability

COSFect COS transfection reagent is non-toxic for cells.

Complexes of DNA and COSFect were prepared as previously described (0.4 µg and 0.5 µg per well in a 24-well plate/ ratio 2:1) and DNA transfection with other commercial transfection reagents was performed as recommended by the manufacturers (0.4 µg and 0.5 µg / recommended ratios). After 24 H transfection, COS-7 viability was measured with the MTT cell proliferation Assay Kit (OZ Biosciences - Ref # MT01000) and compared to un-treated cells.



Results show that viability is not hampered in the transfected cells with COSFect.