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TEMPORAL PARAMETERS OF THE p53-GFP FUSION PROTEIN TRANSFER VIA EXOSOMES IN CULTURED CELLS

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In this study we presented a model for visualization of the exosome transfer of p53-GFP protein between cultured mammalian cells. We employed HEK293 cells stably expressing p53ΔY126-GFP protein as donor of the exosomes, while the original HEK293 cell line was use as recipient. Our results provide evidence that the recipient cells accumulated in their cytoplasm the p53-GFP protein originated from the donor cells via exosome transport. We have analyzed time-coarse of the p53-GFP in cells-recipients. We have shown that the detectable accumulation of the p53-GFP protein in the recipient cells takes quite prolonged time. Temporal parameters of the exosome p53-GFP transfer differ between single cells.

Keywords: cell-to-cell communication, cell lines, exosomes, p53-GFP