

# Quick Protocol



## ScreenFect®mRNA Transfection Reagent

### Package Contents

Cat. No.	ScreenFect®mRNA	Dilution Buffer
S-5001-2	0.2 ml	10 ml
S-5001	1.0 ml	50 ml
S-5001-3	5 x 1.0 ml	5 x 50 ml

### Storage Conditions

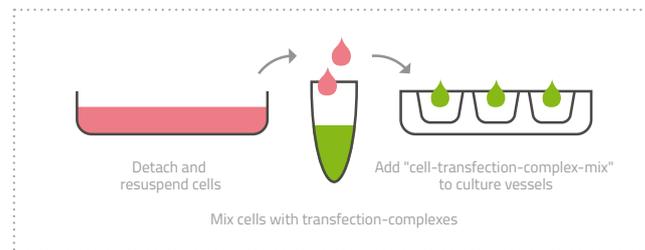
Store ScreenFect® Reagents at 4 °C. Do not freeze. For optimal long term activity, do not allow ScreenFect® Reagents to warm to room temperature each time it is used.

After several months of storage without using the reagent a slight precipitation might occur. If vortexed thoroughly, this has no influence on the performance of ScreenFect® Reagents.

### General Considerations

For optimal results, amounts of ScreenFect®mRNA and nucleic acid (NA) need to be optimized for each cell type and each NA used. An optimization protocol is provided in our product manual which can be downloaded from the Incella homepage. We strongly recommend the One-Step transfection method for all of our products. For transfection of adherent cells, remove the used medium and mix fresh medium with the transfection complexes. Then add the mix to the cells.

## ScreenFect® Protocol: One-Step Transfection



## ScreenFect® Products

### ScreenFect®A

Multipurpose reagent (most suitable for pDNA transfection, suitable for RNA applications) with very low cytotoxicity.

### ScreenFect®A-plus

Multipurpose reagent with optimized formulation requiring less reagent per transfection.

### ScreenFect®siRNA

Specialized reagent for best performance in siRNA delivery.

### ScreenFect®mRNA

Optimized reagent for the delivery of mRNA.

For additional information regarding ScreenFect®mRNA and other ScreenFect® Products, visit our homepage ([www.screenfect.com](http://www.screenfect.com)) and view our product pages and instruction manuals.

# Quick Protocol



## Protocol for mRNA Transfection

Component	Procedure for one well (96-well-plate)	96-well	24-well	6-well
<b>1 Reagent Dilution</b>	Dilute 0.25 µl of ScreenFect®mRNA in Dilution Buffer to a final volume of 10 µl and mix thoroughly.	0.25 µl reagent 10 µl dilution	1.5 µl reagent 40 µl dilution	5 µl reagent 120 µl dilution
<i>Important: Vortex the reagent once per day of use. Add ScreenFect®mRNA reagent directly into supplied buffer with rapid pipette mixing or vortexing.</i>				
<b>2 mRNA Dilution</b>	Dilute a total of 75 ng mRNA in Dilution Buffer to a final volume of 10 µl.	75 ng 10 µl dilution	300 ng 40 µl dilution	1000 ng 120 µl dilution
<i>Tip: The amount of mRNA depends on the particular protein it encodes or function it has in the cell.</i>				
<b>3 Complex formation</b>	Combine the dilutions of mRNA and ScreenFect®mRNA and mix immediately using 10 rapid pipette strokes. Leave for 20 min at room temperature for complex formation.	20 µl complexes	80 µl complexes	240 µl complexes
<i>Important: Do not vortex!</i>				
<b>4 Cell preparation &amp; transfection</b>	Add 80 µl freshly detached and resuspended cells to the complexes and mix with pipette.	Add 80 µl cell suspension	Add 420 µl cell suspension	Add 1250 µl cell suspension
<i>Tip: The time-saving reverse cell transfection method may not be suited for all cell types. To transfect adherent cells, first remove and discard medium from cells, then add 80 µl fresh culture medium to transfection complexes, mix with pipette and immediately apply to cells.</i>				
<b>5 Cell plating</b>	Transfer the cells and complexes to one well of a 96-well plate.	Transfer cells with complexes to plate	Transfer cells with complexes to plate	Transfer cells with complexes to plate

**Note:** This protocol is a guideline. Values are suitable for easy for transfect cell lines. This protocol does not replace optimization experiments. View our manual for instructions. Serum does not affect the performance of ScreenFect®mRNA but we recommend avoiding antibiotics. Cells must be mycoplasma free, in exponential growth phase and have even plating density across the entire surface area.