# **Quick Protocol**



# ScreenFect®A-plus Transfection Reagent

### **Package Contents**

Cat. No.	ScreenFect®A-plus	Dilution Buffer
S-6001-2	0.2 ml	10 ml
S-6001	1.0 ml	50 ml
S-6001-3	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.

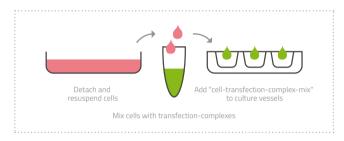
#### **General Considerations**

For optimal results, amounts of ScreenFect®A-plus 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 ScreenFect homepage. We strongly recommend the One-Step transfection method for all of our products. For transfection of adherent cells, first remove most medium from cells then add fresh medium to transfection complexes and mix gently with pipette before addition to the cells.

#### **Dilution Buffer Volumes**

To limit unnecessary wastage, we ship 50 mL ScreenFect® Dilution Buffer as standard per mL ScreenFect® reagents. In some situations the amount of ScreenFect® Dilution Buffer may be limiting with respect to the amount of ScreenFect®A-plus reagent. If you require additional Dilution Buffer for your particular transfection experiments, please contact us.

## 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®UP	Reagent kit for protein production in HEK suspension cells.	

For additional information regarding ScreenFect®A-plus and other ScreenFect® Products, visit our homepage (www.screenfect.com) and view our product pages and instruction manuals.

# **Quick Protocol**



## Protocol for pDNA Transfection

	Component	Procedure for one well (96-well-plate)	96-well	24-well	6-well	
	Reagent Dilution	Dilute 0.2 µl of ScreenFect®A-plus in Dilution Buffer to a final volume of 7 µl and mix thoroughly.	0.2 μl reagent 7 μl dilution	1 μl reagent 30 μl dilution	4 μl reagent 120 μl dilution	
		Important: Vortex the reagent once per day of use. Add ScreenFect®A-plus reagent directly into supplied buffer with rapid pipette mixing or vortexing.				
2	pDNA Dilution	Dilute a total of 75 ng pDNA in Dilution Buffer to a final volume of 7 $\mu \mathrm{l}.$	75 ng 7 μl dilution	300 ng 30 µl dilution	1000 ng 120 µl dilution	
		Tip: Include a positive control for quick and easy detection of transfection (e.g. using GFP plasmid and fluorescence microscopy).				
3	Complex formation	Combine the diluted ScreenFect®A-plus and DNA and mix immediately using 10 rapid pipette strokes.  Leave for 20 min at room temperature for complex formation.	14 µl complexes	60 µl complexes	240 µl complexes	
		Important: Do not vortex!				
4	Cell preparation & transfection	Add 80 $\mu l$ 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	
		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.				
5	Cell plating	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 to transfect cell lines. This protocol does not replace optimization experiments. View our manual for instructions. Serum does not affect the performance of ScreenFect®A-plus but we recommend avoiding antibiotics.

Cells must be mycoplasma free, in exponential growth phase and have even plating density across the entire surface area.