# **Quick Protocol**

## ScreenFect®A-plus Transfection Reagent

### Package Contents

Cat. No.	ScreenFect®A-plus	SFA P-reagent	Dilution Buffer
S-6001-2	0.2 ml	-	20 ml
S-6001	1.0 ml	-	50 ml
S-1002-2	-	0.1 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, SFA P-reagent 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®A-plus is suitable for pDNA and RNA transfection (view our manual for optimized protocols). For best results in mRNA and siRNA delivery, test our specialized reagents.

# 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.

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



# **Quick Protocol**



## Protocol for pDNA Transfection

	Component	Procedure for one well (96-well-plate)	96-well	24-well	6-well		
	Reagent Dilution	Dilute 0.15 $\mu l$ of ScreenFect®A-plus in Dilution Buffer to a final volume of 10 $\mu l$ and mix thoroughly.	0.15 μl reagent 10 μl dilution	1 μl reagent 40 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 10 µl. Add 150 nl of SFA P-reagent and proceed with step 3 within <b>&lt; 1min</b> to ensure maximum performance.	<b>75 ng 10 μl dilution</b> + 150 nl SFA P-reag.	<b>300 ng 40 μl dilution</b> + 600 nl SFA P-reag.	1000 ng 120 μl dilution +2 μl SFA P-reag.		
		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.	20 µl complexes	80 µl complexes	240 µl complexes		
		Important: Do not vortex!					
4	Cell preparation & transfection	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		
		<b>Tip:</b> 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 for 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.

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