

Technical Info



Transfection Protocols ROTI®Fect RNAi - 3129

Cells / Cell line: HeLa (Human cervix carcinoma)

A)

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Seeding	6wells, 8x10 ⁴ cells / well, 24 hrs prior to transfection
Medium	DMEM incl. 10 % FCS plus antibiotics overnight,
DNA / RNA	GTPase siRNA
Transfection complex	Buffer: 180 μl
·	ROTI®Fect RNAi: 12 µl
	siRNA: 180 pmol
	incubation for 15 mins (complex formation)
Transfection	Wash cells with PBS, overlay with transfection complex.
	Add 1.8 ml full DMEM.
Incubation	24 up to 48 hours
Detection	SDS-PAGE -> Western-Blot
Result	Normalization of the Blot against tubulin.
	Silencing ca. 95 % after 48 h (approx. 35 % after 24 h). Similar silencing rates
	with Oligofectamin needed 5 days incubation.

B)

Seeding	24wells: 0.4x10 ⁵ cells / well, and 6wells: 3.5x10 ⁵ cells / well 24 hrs
Medium	DMEM incl. 10 % FCS plus antibiotics overnight,
DNA / RNA	siRNA, fluorescent plasmid (GFP) for evaluation of transfection efficiency
Transfection complex	Buffer: 60 µl / 180 µl
·	ROΤI®Fect RNAi: 4 μl / 12 μl
	siRNA: 60 pmol / 180 pmol
	incubation for 15 mins (complex formation)
Transfection	Overlay washed with transfection complex and add 500 µl or 2 ml full DMEM.
Incubation	24 until fluorescence microscopy, 48 hours for silencing
Detection	fluorescence microscopy and SDS-PAGE -> Western-Blot
Result	No cytotoxicity detectable (Phase contrast microscopy), no increased apoptosis, no morphology changes.
	Silencing of 3.5x10 ⁵ cells / 6well> rate of less than 20 %.
	Silencing of 0.4x10 ⁵ cells / 24well> rate of less than 60-90 % and good fluores-
	cent signals (marker plasmids). Results were comparable to that achieved with
	RNAiMax.





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