

Optimization of Nucleofection® Conditions

A Short Guideline

The Cell Line Optimization Nucleofector® Kits as well as the Primary Cell Optimization Nucleofector® Kits are working with a program matrix comprising of 15 Nucleofection® Programs for a first optimization. In most cases you will receive good results by applying this matrix only. However, for maximum performance and depending on your desired outcome a fine tuning to reach higher efficiency or higher viability is possible. The kit concept enables this by offering

an additional strip for fine-tuning. Use these 16 reactions to further optimize your results. To do this:

- Select the best solution and the best program(s) from the first optimization round (for example **DN-100**)
- Use the table below to select alternative programs leading to higher viability (for example **DH-100**) or better efficiency (for example **ER-100**)

← Increasing Viability				Best Program	Increasing Efficiency →			
CA-113	CA-123	CA-132	CA-139	CA-137	CA-158	CA-189	CA-167	CA-201
CL-138	CM-113	CM-119	CM-132	CM-138	CM-134	CM-167	CU-138	DG-138
CL-135	CL-137	CM-134	CM-135	CM-137	CM-158	CM-189	CU-137	DG-137
CL-120	CL-150	CM-116	CM-120	CM-150	CM-198	CM-156	CU-150	DG-150
CY-100	DA-100	DH-100	DI-100	DN-100	DP-100	EH-100	ER-100	FA-100
DG-138	DS-113	DS-119	DS-132	DS-138	DS-134	DS-167	DT-138	ED-138
DG-135	DG-137	DS-134	DS-135	DS-137	DS-158	DS-189	DT-137	ED-137
DG-130	DS-128	DS-107	DS-118	DS-130	DS-155	DS-139	DT-130	ED-130
DG-120	DG-150	DS-116	DS-120	DS-150	DS-198	DS-156	DT-150	ED-150
DG-120	DS-106	DS-103	DS-111	DS-120	DS-141	DS-142	DT-120	ED-120
DG-113	DS-112	DS-109	DS-104	EH-100	DS-123	DS-118	DT-113	ED-113
CM-100	CV-100	DG-100	DR-100	EO-100	DT-100	DU-100	ED-100	EN-100
DZ-135	DZ-137	EH-118	EH-135	EN-138	EH-158	EH-189	ER-137	FA-137
DZ-120	DZ-150	EH-116	EH-120	EN-150	EH-198	EH-156	ER-150	FA-150
DZ-113	EH-112	EH-109	EH-104	EW-113	EH-123	EH-118	ER-113	FA-113

Note: Selecting pulses for higher viability will most probably lead to a lower efficiency and pulses optimized for higher efficiency will lead to higher mortality. In case you can't reach the desired performance, please contact our Scientific Support team for assistance.

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