invitrogen

Competent cell selection guide

An overview of competent cells listed by recommended applications

Product	Quantity	Transformation efficiency*	Chemically (C) or electro (E) competent	T1 phage resistance (*tonA*)	Reduces recombination events (*recA*)	Improves miniprep plasmid DNA quality (endA1)	Blue/white screening (lacZΔM15)	Cat. No.
Routine cloning								
MAX Efficiency® DH10B™	5 × 200 µL	> 1 × 10^9	C	—	•	•	•	18297-010
MAX Efficiency® DH5α™	5 × 200 µL	> 1 × 10^9	C	—	•	•	•	18258-012
One Shot® MAX Efficiency® DH10B™ T1^R	20 × 50 µL	> 1 × 10^9	C	•	•	•	•	12331-013
One Shot® MAX Efficiency® DH5α™ T1^R	20 × 50 µL	> 1 × 10^9	C	•	•	•	•	12297-016
One Shot® OmniMAX™ 2 T1^R	20 × 50 µL	> 5 × 10^9	C	•	•	•	•	C8540-03
One Shot® TOP10	20 × 50 µL	> 1 × 10^9	C	—	•	•	•	C4040-03
One Shot® TOP10	10 × 50 µL	> 1 × 10^9	C	—	•	•	•	C4040-10
One Shot® TOP10F´	20 × 50 µL	> 1 × 10^9	C	—	•	•	•	C3030-03
ElectroMAX™ DH10B™ T1^R	5 × 100 µL	> 1 × 10^{10}	E	•	•	•	•	12033-015
Library Efficiency® DH5α™	5 × 200 µL	> 1 × 10^8	C	—	•	•	•	18263-012
Subcloning Efficiency™ DH5α™	4 × 500 µL	> 1 × 10^6	C	—	•	•	•	18265-017
Fast growth								
One Shot® Mach1™ T1^R	20 × 50 µL	> 1 × 10^9	C	•	•	•	•	C8620-03
MultiShot™ StripWell Mach1™ T1^R	1 × 96-well plate	> 1 × 10^9	C	•	•	•	•	C8696-01
High-throughput cloning								
MultiShot™ StripWell TOP10	1 × 96-well plate	> 1 × 10^8	C	—	•	•	•	C4096-01
MultiShot™ TOP10	5 × 96-well plates	> 1 × 10^8	C	—	•	•	•	C400-05

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High-efficiency transformation and library construction								
MegaX DH10B™ T1^{R} Electrocomp™	5 x 100 µL	> 3 × 10^{10}	E	•	•	•	•	C6400-03
One Shot® OmniMAX™ 2 T1^{R}	20 × 50 µL	> 5 × 10^{9}	C	•	•	•	•	C8540-03
ElectroMAX™ DH10B™ T1^{R}	5 × 100 µL	> 1 × 10^{10}	E	•	•	•	•	12033-015
ElectroMAX™ DH10B™	5 × 100 µL	> 1 × 10^{10}	E	—	•	•	•	18290-015
ElectroMAX™ DH5α-E™	5 × 100 µL	> 1 × 10^{10}	E	—	•	•	•	11319-019
Cloning unstable DNA								
ElectroMAX™ Stbl4™	5 × 100 µL	> 5 × 10^{9}	E	—	•	•	•	11635-018
One Shot® Stbl3™	20 × 50 µL	> 1 × 10^{8}	C	—	•	—	—	C7373-03
MAX Efficiency® Stbl2™	5 × 200 µL	> 1 × 10^{9}	C	—	•	•	—	10268-019
Protein expression								
One Shot® BL21(DE3)	20 x 50 µL	> 1 x 10^{8}	C	—	—	—	—	C6000-03
One Shot® BL21(DE3) pLysE	20 x 50 µL	> 1 x 10^{7}	C	—	—	—	—	C6565-03
One Shot® BL21(DE3) pLysS	20 x 50 µL	> 1 x 10^{8}	C	—	—	—	—	C6060-03
One Shot® BL21(DE3) pLysS	10 x 50 µL	> 1 x 10^{8}	C	—	—	—	—	C6060-10
One Shot® BL21 Star™ (DE3)	20 x 50 µL	> 1 x 10^{8}	C	—	—	—	—	C6010-03
One Shot® BL21 Star™ (DE3) pLysS	20 x 50 µL	> 1 x 10^{8}	C	—	—	—	—	C6020-03
One Shot® BL21-A1™	20 x 50 µL	> 1 x 10^{8}	C	—	—	—	—	C6070-03
ssDNA propagation								
ElectroMAX™ DH12S™	5 x 100 µL	> 1 x 10^{10}	E	—	•	—	•	18312-017
Preparing unmethylated DNA								
One Shot® INV110	20 × 50 µL	> 1 × 10^{6}	C	•	—	•	•	C7171-03
Bacmid creation								
MAX Efficiency® DH10Bac™	5 x 100 µL	> 1 x 10^{8}	C	—	—	—	•	10361-012
Cre-lox recombination								
One Shot® PIR1	10 x 50 µL	> 1 X 10^{9}	C	—	•	•	—	C1010-10
One Shot® PIR2	10 x 50 µL	> 1 X 10^{8}	C	—	•	•	—	C1111-10
ccdB vector propagation								
One Shot® *ccd*B Survival™ 2 T1^{R} Competent Cells	11 x 50 µL	> 1 X 10^{9}	C	•	•	•	•	A10460

* Transformants/µg pUC19 DNA

For a complete listing of all of Invitrogen's competent cell strains, go to **lifetechnologies.com/compcells**

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