

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 x 200 µL	> 1 x 10 ⁹	C	—	•	•	•	18297-010
MAX Efficiency DH5α	5 x 200 µL	> 1 x 10 ⁹	C	—	•	•	•	18258-012
One Shot MAX Efficiency DH10B T1 ^R	20 x 50 µL	> 1 x 10 ⁹	C	•	•	•	•	12331-013
One Shot MAX Efficiency DH5α T1 ^R	20 x 50 µL	> 1 x 10 ⁹	C	•	•	•	•	12297-016
One Shot OmniMAX 2 T1 ^R	20 x 50 µL	> 5 x 10 ⁹	C	•	•	•	•	C8540-03
One Shot TOP10	20 x 50 µL	> 1 x 10 ⁹	C	—	•	•	•	C4040-03
One Shot TOP10	10 x 50 µL	> 1 x 10 ⁹	C	—	•	•	•	C4040-10
One Shot TOP10F'	20 x 50 µL	> 1 x 10 ⁹	C	—	•	•	•	C3030-03
ElectroMAX DH10B T1 ^R	5 x 100 µL	> 1 x 10 ¹⁰	E	•	•	•	•	12033-015
Library Efficiency DH5α	5 x 200 µL	> 1 x 10 ⁸	C	—	•	•	•	18263-012
Subcloning Efficiency DH5α	4 x 500 µL	> 1 x 10 ⁶	C	—	•	•	•	18265-017
Fast growth								
One Shot Mach1 T1 ^R	20 x 50 µL	> 1 x 10 ⁹	C	•	•	•	•	C8620-03
MultiShot StripWell Mach1 T1 ^R	1 x 96-well plate	> 1 x 10 ⁹	C	•	•	•	•	C8696-01

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High-throughput cloning								
MultiShot StripWell TOP10	1 x 96-well plate	> 1 x 10 ⁸	C	—	•	•	•	C4096-01
MultiShot TOP10	5 x 96-well plates	> 1 x 10 ⁸	C	—	•	•	•	C400-05
High-efficiency transformation and library construction								
MegaX DH10B T1 ^R Electrocomp	5 x 100 μL	> 3 x 10 ¹⁰	E	•	•	•	•	C6400-03
One Shot OmniMAX 2 T1 ^R	20 x 50 μL	> 5 x 10 ⁹	C	•	•	•	•	C8540-03
ElectroMAX DH10B T1 ^R	5 x 100 μL	> 1 x 10 ¹⁰	E	•	•	•	•	12033-015
ElectroMAX DH10B	5 x 100 μL	> 1 x 10 ¹⁰	E	—	•	•	•	18290-015
ElectroMAX DH5α-E	5 x 100 μL	> 1 x 10 ¹⁰	E	—	•	•	•	11319-019
Cloning unstable DNA								
ElectroMAX Stbl4	5 x 100 μL	> 5 x 10 ⁹	E	—	•	•	•	11635-018
One Shot Stbl3	20 x 50 μL	> 1 x 10 ⁸	C	—	•	—	—	C7373-03
MAX Efficiency Stbl2	5 x 200 μL	> 1 x 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 x 50 μL	> 1 x 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 ccdB 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™ competent cell strains, go to thermofisher.com/compcells



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