

Competent cells selection guide

Blue-white capable
 Phage T1 resistant
 Restriction-deficient (RMS)
 End A-/RecA
 Clone methylated (RMS)
 Inducible plasmid copy number
 F-episome
 Antibiotic resistance
 Electrocompetent: efficiency
 Chemically competent: efficiency

Routine cloning and library construction										
E. cloni® 10G (Classic)	✓	✓	✓	✓	✓	∅	∅	Str	≥5 × 10 ⁹	10 ⁶ -10 ⁹
E. cloni 10G (Elite)	✓	✓	✓	✓	✓	∅	∅	Str	≥2 × 10 ¹⁰	–
E. cloni 10G (Supreme)	✓	✓	✓	✓	✓	∅	∅	Str	≥4 × 10 ¹⁰	–
E. cloni 10G F' (Elite)	✓	✓	✓	✓	✓	∅	✓	Str	≥2 × 10 ¹⁰	–
E. cloni 5-alpha	✓	✓	✓	∅	∅	∅	∅	–	–	≥1 × 10 ⁸
BAC cloning										
BAC-Optimised Replicator™ v2.0	✓	∅	✓	✓	✓	a	∅	Amp, Str	≥1 × 10 ¹⁰	–
E. cloni BAC-Optimised 10G	✓	∅	✓	✓	✓	∅	∅	Str	≥1 × 10 ¹⁰	–
BigEasy™-TSA	b	✓	✓	✓	✓	c	∅	Amp, Str	≥2 × 10 ¹⁰	–
Phage display										
TG1	✓	∅	∅	∅	d	∅	✓	–	≥4 × 10 ¹⁰	–
ER2738	✓	✓	∅	∅	d	∅	✓	Tet	≥2 × 10 ¹⁰	–
SS320 (MC1061 F')	✓	∅	∅	∅	e	∅	✓	Tet, Str	≥4 × 10 ¹⁰	–
MC1061 F-	∅	∅	∅	∅	e	∅	∅	Str	≥4 × 10 ¹⁰	–
CRISPR sgRNA libraries and lentiviral plasmid cloning										
Endura™	∅	∅	f	∅	g	∅	∅	Str	≥1 × 10 ¹⁰	≥1 × 10 ⁷
Site-directed mutagenesis										
CJ236	∅	∅	∅	∅	∅	∅	✓	Cam	≥1 × 10 ⁹	–

Amp, ampicillin; Cam, chloramphenicol; Str, streptomycin; Tet, tetracycline

a: Requires OriV vectors (e.g., CopyRight® and pCCFOS)

b: Requires IPTG

c: Only with pJAZZ® vectors

d: mcrB- only; not suitable for cloning eukaryotic genomic DNA

e: mcrA- mcrB-; not suitable for cloning eukaryotic genomic DNA

f: RecA13 only

g: mcrB- mrr-; not suitable for cloning eukaryotic genomic DNA

Background expression control
 Primary promoter
 Low endotoxin
 Antibiotic resistance
 Electrocompetent: efficiency
 Chemically competent: efficiency

Protein expression: routine						
E. cloni EXPRESS BL21(DE3)	T7	∅	∅	–	≥5 × 10 ⁹	≥1 × 10 ⁷
HI-Control™ BL21(DE3)	T7	✓	∅	Gen	–	≥1 × 10 ⁷
HI-Control™ 10G	P _{lac} ¹ , P _{lac} ² P _{trc} ¹ , T5 _{lac} rhaP _{BAD}	✓	∅	Gen, Str	–	≥1 × 10 ⁹
ClearColi® BL21(DE3)	T7	∅	✓	–	≥1 × 10 ⁹	–
Protein expression: toxic products						
OverExpress™ C41(DE3)	T7	∅	∅	–	≥1 × 10 ⁹	≥1 × 10 ⁶
OverExpress C41(DE3) pLysS	T7	✓	∅	Cam	–	≥1 × 10 ⁶
OverExpress C43(DE3)	T7	∅	∅	–	≥1 × 10 ⁹	≥1 × 10 ⁶
OverExpress C43(DE3) pLysS	T7	✓	∅	Cam	–	≥1 × 10 ⁶

Cam, chloramphenicol; Gen, gentamicin; Str, streptomycin; rhaPBAD, rhamnose-inducible promoter

- **Support** - Personalised service from initial discussion through delivery
- **Flexibility** - Choose from the following options to match your specific needs:
 - Style:** Chemically competent or electrocompetent cells
 - Dispense volume:** bulk or small aliquots
 - Format:** 96-well plates or tubes of your choice
 - Strains:** Lucigen or any BSL1 E. coli strain of choice that meets your application needs
- **Transformation efficiency** - High efficiencies that match your needs, up to an industry-leading 4 × 10¹⁰ cfu/μg DNA
- **Rapid turnaround time** - Average 2–3 weeks
- **Quality** - ISO 13485 Certified with 10+ years of manufacturing excellence, available for OEM and partnerships

Request a quotation today

sales@bioscience.co.uk

01223 316 855

bioscience.co.uk/products/competent-cells

Integrated tools. Accelerated science.

BIOSEARCH™
TECHNOLOGIES
GENOMIC ANALYSIS BY LGC

@LGCBiosearch | lucigen.com

All trademarks and registered trademarks mentioned herein are the property of their respective owners. All other trademarks and registered trademarks are the property of LGC and its subsidiaries. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representative for details. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording or any retrieval system, without the written permission of the copyright holder. © LGC Limited, 2018. All rights reserved. GEN/0526/SW/1118 DS-181129.01



For research or investigational use only.

cambridge bioscience

The better choice for life science researchers