



GoldBio Competent Cells Characteristics and Applications

Products	Transformation Efficiency	Applications and Characteristics
BL21 (DE3) Chemically Competent E. coli Cells (CC-103)	$\geq 1 \times 10^6$ CFU/ μ g	<ul style="list-style-type: none"> – Routine protein expression from non-T7 vectors – For routine T7 expression – Deficient in Lon and OmpT proteases/B strain – Resistant to phage T1 (<i>fhuA2</i>)
BL21 (DE3) Electrocompetent E. coli Cells (CC-204)	$\geq 1 \times 10^8$ CFU/ μ g	<ul style="list-style-type: none"> – Protein expression and complex library expression – For routine T7 expression – Deficient in Lon and OmpT proteases – Resistant to phage T1 (<i>fhuA2</i>) – B strain
BL21 Chemically Competent E. coli Cells (CC-102)	$\geq 1 \times 10^6$ CFU/ μ g	<ul style="list-style-type: none"> – Routine protein expression from non-T7 vectors – Deficient in Lon and OmpT proteases – Resistant to phage T1 (<i>fhuA2</i>)

GoldBio Competent Cells Characteristics and Applications



<i>Products</i>	<i>Transformation Efficiency</i>	<i>Applications and Characteristics</i>
<u>DL39 (DE3) Chemically Competent E. coli Cells (CC-104)</u>	$\geq 1 \times 10^7$ CFU/ μ g	<ul style="list-style-type: none">– Transformation and protein expression– Deficient in aromatic, branched-chain and aspartate transaminases– For routine T7 expression
<u>GB10B-Pro™ Electrocompetent E. coli Cells (CC-201)</u>	$\geq 1 \times 10^9$ CFU/ μ g	<ul style="list-style-type: none">– Cloning synthetic bio-applications, BAC cloning, assembling large and multi-DNA fragments

GoldBio Competent Cells Characteristics and Applications



Products	Transformation Efficiency	Applications and Characteristics
GB10B™ Chemically Competent E. coli Cells (CC-100)	$\geq 8.2 \times 10^6$ CFU/ μ g	<ul style="list-style-type: none"> – Cloning and subcloning – Blue/white screening (ϕ80lacZΔM15) – <i>mcrA mcrRBC</i>, and <i>mrr</i> deletion for cloning of methylcytosine and methyladenine-containing DNA – Endonuclease deficient (<i>endA1</i>)
GB10B™ Electrocompetent E. coli Cells (CC-200)	$\geq 2 \times 10^8$ CFU/ μ g	<ul style="list-style-type: none"> – Blue/white screening (ϕ80lacZΔM15) – <i>mcrA mcrRBC</i>, and <i>mrr</i> deletion for cloning of methylcytosine and methyladenine-containing DNA – High transformation efficiency
GB5-alpha™ Chemically Competent E. coli Cells (CC-101)	$\geq 5 \times 10^6$ CFU/ μ g	<ul style="list-style-type: none"> – Cloning and subcloning – Blue/white screening (ϕ80lacZΔM15)

GoldBio Competent Cells Characteristics and Applications



<i>Products</i>	<i>Transformation Efficiency</i>	<i>Applications and Characteristics</i>
GB5-alpha™ Electrocompetent E. coli Cells (CC-203)	$\geq 5 \times 10^8$ CFU/ μ g	<ul style="list-style-type: none"> – High efficiency transformation for many applications including cloning and subcloning – Increased plasmid yield and improved plasmid quality (<i>endA1</i> and <i>recA1</i> mutations)
HB101 Chemically Competent E. coli Cells (CC-150)	$\geq 7 \times 10^6$ CFU/ μ g	<ul style="list-style-type: none"> – Cloning and subcloning – non Blue/white screening – Prevents cleavage of cloned DNA by endogenous restriction enzymes (or the <i>hsdS20</i>(rB-mB-) restriction minus genotype) – Contain the <i>recA13</i> mutation that minimizes recombination and helps insert stability
JM109 Chemically Competent E. coli Cells (CC-114)	$\geq 6 \times 10^5$ CFU/ μ g	<ul style="list-style-type: none"> – Cloning and subcloning – Library construction – Plasmid isolation – Blue-white screening

GoldBio Competent Cells Characteristics and Applications



Products	Transformation Efficiency	Applications and Characteristics
RR1 Chemically Competent E. coli Cells (CC-113)	$\geq 3 \times 10^7$ CFU/ μ g	<ul style="list-style-type: none"> – Cloning and subcloning – recA+ derivative of the HB101 strain
TG1 Phage Display Electrocompetent Cells (CC-205)	$\geq 1 \times 10^9$ CFU/ μ g	<ul style="list-style-type: none"> – Protein expression – Amber suppressor strain (<i>supE</i>) – Phage display library screening
AGL-1 Agrobacterium Chemically Competent Cells (CC-106)	$\geq 4 \times 10^4$ CFU/ μ g	<ul style="list-style-type: none"> – High transformation efficiency – T-DNA binary system with the Ti plasmid pTiBO542 – Rifampicin and carbenicillin resistance



GoldBio Competent Cells Characteristics and Applications

Products	Transformation Efficiency	Applications and Characteristics
AGL-1 Agrobacterium Electrocompetent Cells (CC-208)	$\geq 5 \times 10^7$ CFU/ μ g	<ul style="list-style-type: none"> – High transformation efficiency – cDNA or gDNA library construction – T-DNA binary system with the Ti plasmid pTiBO542 – Rifampicin and carbenicillin resistance
AGL-1 (pSoup) Agrobacterium Electrocompetent Cells (CC-218)	$\geq 2 \times 10^8$ CFU/ μ g	<ul style="list-style-type: none"> – High transformation efficiency – cDNA or gDNA library construction – T-DNA binary system with the Ti plasmid pTiBO542 – Rifampicin and carbenicillin resistance
AGL-1 (pSoup) Agrobacterium Chemically Competent Cells (CC-116)	$\geq 3 \times 10^3$ CFU/ μ g	<ul style="list-style-type: none"> – High transformation efficiency – cDNA or gDNA library construction – Stabilizes recombinant plasmids (<i>recA</i> mutation) – T-DNA binary system with the Ti plasmid pTiBO542 – Rifampicin and carbenicillin resistance

GoldBio Competent Cells Characteristics and Applications



Products	Transformation Efficiency	Applications and Characteristics
AGL-1 (pSoup-P19) Agrobacterium Electrocompetent Cells (CC-228)	$\geq 1 \times 10^8$ CFU/ μ g	<ul style="list-style-type: none"> – High transformation efficiency – cDNA or gDNA library construction – Stabilizes recombinant plasmids (<i>recA</i> mutation) – T-DNA binary system with the Ti plasmid pTiBO542 – Rifampicin and carbenicillin resistance
AGL-1 (pSoup-P19) Agrobacterium Chemically Competent Cells (CC-126)	$\geq 2 \times 10^3$ CFU/ μ g	<ul style="list-style-type: none"> – High transformation efficiency – cDNA or gDNA library construction – Stabilizes recombinant plasmids (<i>recA</i> mutation) – T-DNA binary system with the Ti plasmid pTiBO542 – Rifampicin and carbenicillin resistance
C58C1 Agrobacterium Chemically Competent Cells (CC-109)	$\geq 1 \times 10^5$ CFU/ μ g	<ul style="list-style-type: none"> – Very high transformation efficiency – T-DNA binary system with the Ti plasmid pTiC58 – Rifampicin resistance and streptomycin resistance – <i>Agrobacterium</i>-mediated transformation

GoldBio Competent Cells Characteristics and Applications



Products	Transformation Efficiency	Applications and Characteristics
C58C1 Agrobacterium Electrocompetent Cells (CC-240)	$\geq 1 \times 10^7$ CFU/ μ g	<ul style="list-style-type: none"> – Very high transformation efficiency – T-DNA binary system with the Ti plasmid pTiC58 – Rifampicin resistance and streptomycin resistance – <i>Agrobacterium</i>-mediated transformation
EHA105 Agrobacterium Chemically Competent Cells (CC-108)	$\geq 5 \times 10^4$ CFU/ μ g	<ul style="list-style-type: none"> – High transformation efficiency – <i>Agrobacterium</i>-mediated transformation – T-DNA binary system with the Ti plasmid pEHA105(pTiBo542DT-DNA) – Rifampicin resistance
EHA105 Agrobacterium Electrocompetent Cells (CC-225)	$\geq 1.6 \times 10^8$ CFU/ μ g	<ul style="list-style-type: none"> – High transformation efficiency – cDNA or gDNA library construction – <i>Agrobacterium</i>-mediated transformation – T-DNA binary system with the Ti plasmid pEHA105(pTiBo542DT-DNA) – Rifampicin resistance (pTiBo542DT-DNA)

GoldBio Competent Cells Characteristics and Applications



<i>Products</i>	<i>Transformation Efficiency</i>	<i>Applications and Characteristics</i>
Auxo-Agro™ EHA105 Electrocompetent Cells (CC-268)	$\geq 1.6 \times 10^8$ CFU/ μ g	<ul style="list-style-type: none"> – High transformation efficiency – cDNA or gDNA library construction – <i>Agrobacterium</i> -mediated transformation – Rifampicin resistance (pTiBo542DT-DNA)
Auxo-Agro™ EHA105 Chemically Competent Cells (CC-168)	$\geq 1 \times 10^4$ CFU/ μ g	<ul style="list-style-type: none"> – High transformation efficiency – cDNA or gDNA library construction – <i>Agrobacterium</i> -mediated transformation – Rifampicin resistance (pTiBo542DT-DNA)
EHA105 (pSoup) Agrobacterium ElectroCompetent Cells (CC-235)	$\geq 4 \times 10^8$ CFU/ μ g	<ul style="list-style-type: none"> – High transformation efficiency – cDNA or gDNA library construction – <i>Agrobacterium</i> -mediated transformation – T-DNA binary system with the Ti plasmid pEHA105(pTiBo542DT-DNA) – Rifampicin resistance (pTiBo542DT-DNA)



GoldBio Competent Cells Characteristics and Applications

Products	Transformation Efficiency	Applications and Characteristics
EHA105 (pSoup-P19) Agrobacterium ElectroCompetent Cells (CC-245)	$\geq 3 \times 10^8$ CFU/ μ g	<ul style="list-style-type: none"> – High transformation efficiency – cDNA or gDNA library construction – <i>Agrobacterium</i> -mediated transformation – T-DNA binary system with the Ti plasmid pEHA105(pTiBo542DT-DNA) – Rifampicin resistance (pTiBo542DT-DNA)
EHA105 (pSoup-P19) Agrobacterium Chemically Competent Cells (CC-128)	$\geq 2 \times 10^3$ CFU/ μ g	<ul style="list-style-type: none"> – High transformation efficiency – cDNA or gDNA library construction – <i>Agrobacterium</i> -mediated transformation – T-DNA binary system with the Ti plasmid pEHA105(pTiBo542DT-DNA) – Rifampicin resistance (pTiBo542DT-DNA)
GV3101 Agrobacterium Electrocompetent Cells (CC-207)	$\geq 2 \times 10^8$ CFU/ μ g	<ul style="list-style-type: none"> – Very high transformation efficiency – cDNA or gDNA library construction – T-DNA binary system with the Ti plasmid pMP90(pTiC58DT-DNA) – Rifampicin resistance and gentamicin resistance – <i>Agrobacterium</i> -mediated transformation

GoldBio Competent Cells Characteristics and Applications



Products	Transformation Efficiency	Applications and Characteristics
GV3101 Agrobacterium Chemically Competent Cells (CC-105)	$\geq 6 \times 10^4$ CFU/ μ g	<ul style="list-style-type: none"> – Very high transformation efficiency – cDNA or gDNA library construction – T-DNA binary system with Ti plasmid pTiC58DT-DNA – Rifampicin resistance and gentamicin resistance – <i>Agrobacterium</i>-mediated transformation
LBA4404 Agrobacterium Chemically Competent Cells (CC-107)	$\geq 1 \times 10^4$ CFU/ μ g	<ul style="list-style-type: none"> – High transformation efficiency – <i>Agrobacterium</i>-mediated transformation – T-DNA binary system with the Ti plasmid pAL4404 – Rifampicin resistance
LBA4404 Agrobacterium Electrocompetent Cells (CC-220)	$\geq 4 \times 10^6$ CFU/ μ g	<ul style="list-style-type: none"> – High transformation efficiency – <i>Agrobacterium</i>-mediated transformation – T-DNA binary system with the Ti plasmid pAL4404 – Rifampicin resistance



GoldBio Competent Cells Characteristics and Applications

<i>Products</i>	<i>Transformation Efficiency</i>	<i>Applications and Characteristics</i>
Auxo-Agro™ LBA4404 Electrocompetent Cells (CC-267)	$\geq 4 \times 10^6$ CFU/ μ g	<ul style="list-style-type: none">– High transformation efficiency– <i>Agrobacterium</i> -mediated transformation– T-DNA binary system with the Ti plasmid pAL4404– Rifampicin resistance
Auxo-Agro™ LBA4404 Chemically Competent Cells (CC-167)	$\geq 1 \times 10^4$ CFU/ μ g	<ul style="list-style-type: none">– High transformation efficiency– <i>Agrobacterium</i> -mediated transformation– T-DNA binary system with the Ti plasmid pAL4404– Rifampicin resistance