

Additional *E. coli* Strain Genotypes

These *E. coli* strains are not supplied by New England Biolabs. Sources are listed in blue type.

Strain (Source)	Ref	Genotype
71-18	2	F' lacI ^Δ (lacZ)M15 proA ⁺ B ⁺ /Δ(lac-proAB) thi glnV
BHB2688 (A)	3	F ⁻ recA λ'(λE _{am} 4 b2 red3 imm434 clts Sam7)
BHB2690 (A)	3	F ⁻ recA λ'(λE _{am} 15 b2 red3 imm434 clts Sam7)
BL21 (DE3) (N)	17	F ⁻ ompT gal[dcm][lon] hsdS _B (r _B ⁻ m _B ⁻ ; an <i>E. coli</i> B strain) with DE3, a λ prophage carrying the T7 RNA polymerase gene
BNN93 (A)	4, 5, 6	F ⁻ e14 ⁻ (McrA ⁻) hsdR (r _K ⁻ m _K ⁻) glnV44 thr-1 leuB6 thi-1 lacY1 fhuA21 mcrB; Some isolates circulating as C600 are actually BNN93
BNN102 (A)	4, 5, 6	BNN93 hflA150::Tn10(Tet ^r); The strain known as C600hfl is better known as BNN102
C600 (CGSC)	5, 8	F ⁻ [e14 ⁻ (McrA ⁻) ore14 ⁺ (McrA ⁺)] thr-1 leuB6 thi-1 lacY1 glnV44 rfbD1 fhuA21; The original C600 is EcoK ^r m ⁺ McrBC ⁺ ; See BNN93 [†]
C600hfl	4, 5, 6	BNN102 is sometimes called C600hfl
CES200 (A, CGSC)	1	F ⁻ thr-1 ara-14 Δ(gpt-proA)62 lacY1 tsx33 glnV44 galK2 hisG4 rfbD1 rpsL31 (Str ^r) kdgD51 xyl-5 mtl-1 argE3 leuB6 hsdR (r _K ⁻ m _K ⁺) recB21 recC22 sbcB15 sbcC
CSH18	9	F ⁻ Δ(lacZ)H125 proA ⁺ B ⁺ /Δ(lac-pro) glnV thi
DB1316 (A, CGSC)	1, 6	F ⁻ recD1014 mcrB1 hsdR2 (r _K ⁻ m _K ⁺) zjj202::Tn10 (Tet ^r)
DH1 (LTI)	8	F ⁻ glnV44 recA1 endA1 gyrA96(Nal ^r) thi1 hsdR17 (r _K ⁻ m _K ⁺) relA1 spoT1? rfbD1?
DH5αF' (LTI)	6, 7	F ⁻ /endA1 hsdR17 (r _K ⁻ m _K ⁺) glnV44 thi-1 recA1 gyrA (Nal ^r) relA1 Δ(lacZYA-argF)U169 deoR(φ80 lacΔ(lacZ)M15)
DL538	6, 10	NM621 sbcC201
DP50 (A)	3	F ⁻ fhuA53 dapD8 lacY1 glnV44 Δ(gal-uvrB)47 tyrT58(=supF58) gyrA29(Nal ^r) Δ(thyA)57 hsdS3 (r _K ⁻ m _K ⁻)
ED8654 (CGSC)	11	F ⁻ e14 ⁻ (McrA ⁻) lac-3 or lacY1 galK2 galT22 glnV44 supF58 metB1 hsdR514 (r _K ⁻ m _K ⁺) trpR55
ED8767 (CGSC)	6, 11	F ⁻ e14 ⁻ (McrA ⁻) lac-3 or lacY1 galK2 galT22 glnV44 supF58 metB1 mcrB1 hsdS3 (r _K ⁻ m _K ⁻)
GM48 (A)	12	F ⁻ thr leu thi lacY galK galT ara fhuA tsx dam dcm glnV44

Strain Sources

A = ATCC (<http://www.atcc.org>),

CGSC = *E. coli* Genetic Stock Center (<http://cgsc.biology.yale.edu>),

LTI = Invitrogen Life Technologies, N = Novagen, S = Stratagene

Strain (Source)	Ref	Genotype
GM2929 (CGSC)	12	F ⁻ ara-14 leuB6 thi-1 fhuA31 lacY1 tsx-78 galK2 galT22 glnV44 hisG4 rpsL136 (Str ^r) xyl-5 mtl-1 dam13::Tn9 (Cam ^r) dcm-6 mcrB1 hsdR2 (r _K ⁻ m _K ⁺) mcrA recF143
HB101 (A)	3, 13	F ⁻ Δ(gpt-proA)62 leuB6 glnV44 ara-14 galK2 lacY1 Δ(mcrC-mrr) rpsL20 (Str ^r) xyl-5 mtl-1 recA13 thi-1
JM83 (A)	2	F ⁻ ara Δ(lac-proAB) rpsL (Str ^r) [φ80 dlacΔ(lacZ)M15] thi
JM103 (A)	2	F ⁻ traD36 lacI ^Δ (lacZ)M15 proA ⁺ B ⁺ / endA1 glnV sbcBC thi-1 rpsL (Str ^r) Δ(lac-pro) (P1) (r _K ⁺ m _K ⁺ r _{P1} ⁺ m _{P1} ⁺)
JM105 (A)	2	F ⁻ traD36 lacI ^Δ (lacZ)M15 proA ⁺ B ⁺ / thi rpsL (Str ^r) endA sbcB15 sbcC? hsdR4 (r _K ⁻ m _K ⁺) Δ(lac-proAB)
JM107 (A)	2	F ⁻ traD36 lacI ^Δ (lacZ)M15 proA ⁺ B ⁺ / e14 ⁻ (McrA ⁻) Δ(lac-proAB) thi gyrA96 (Nal ^r) endA1 hsdR17 (r _K ⁻ m _K ⁺) relA1 glnV44
JM110 (A)	2	F ⁻ traD36 lacI ^Δ (lacZ)M15 proA ⁺ B ⁺ / rpsL (Str ^r) thr leu thi lacY galK galT ara fhuA dam dcm glnV44 Δ(lac-proAB)
K802 (A, CGSC)	3, 6, 8	See WA802
K803 (A, CGSC)	3, 6, 8	See WA803
LE392 (A, CGSC)	3	F ⁻ e14 ⁻ (McrA ⁻) hsdR514 (r _K ⁻ m _K ⁺) glnV44 supF58 lacY1 or Δ(lacZY)6 galK2 galT22 metB1 trpR55
MC1061 (A)	1, 7	F ⁻ araD139 Δ(ara-leu)7696 galE15 galK16 Δ(lac)X74 rpsL (Str ^r) hsdR2 (r _K ⁻ m _K ⁺) mcrA mcrB1
MC4100 (A)	14	F ⁻ araD139 Δ(argF-lac)U169 rpsL150 (Str ^r) relA1 flbB5301 deoC1 ptsF25 rbsR
MM294 (A)	8	F ⁻ endA1 hsdR17 (r _K ⁻ m _K ⁺) glnV44 thi-1 relA1? rfbD1? spoT1?
NM477	5, 6	C600Δ(hsdMS-mcrB)5 (r _K ⁻ m _K ⁻ McrBC ⁻)
NM554	5	MC1061 recA13
NM621	10	F ⁻ hsdR (r _K ⁻ m _K ⁺) mcrA mcrB glnV44 recD1009
P2392 (S)	7	LE392(P2)
Q358 (A)	7	F ⁻ hsdR (r _K ⁻ m _K ⁺) glnV fhuA (φ80 ^r)
Q359 (A)	7	Q358 (P2)
RR1 (A)	3	HB101 RecA ⁺
WA802 (A, CGSC)	3, 6, 8	F ⁻ e14 ⁻ (McrA ⁻) lacY1 or Δ(lac)6 glnV44 galK2 galT22 rfbD1 metB1 mcrB1 hsdR2 (r _K ⁻ m _K ⁺)

Strain (Source)	Ref	Genotype
WA803 (A, CGSC)	3, 6, 8	F ⁻ e14 (McrA ⁻) lacY1 or Δ(lac)6 glnV44 galK2 galT22 rfbD1 metB1 mcrB1 hsdS3 (r _K ⁻ m _K ⁻)
χ1776 (A, CGSC)	3	F ⁻ fhuA53 dapD8 minA1 glnV44 (=glnV44) Δ(gal-uvrB)40 minB2 rfb-2 gyrA25 (Nal ^r) thyA142 oms-2 metC65 oms-1 (tte-1) Δ(bioH-asd)29 cycB2 cycA1 hsdR2 (r _K ⁻ m _K ⁺) mcrB1?
XL1-Blue (S)	15	F ⁻ ::Tn10 proA ⁺ B ⁺ lacI ^q Δ(lacZ)M15/recA1 endA1 gyrA96 (Nal ^r) thi hsdR17 (r _K ⁻ m _K ⁺) glnV44 relA1 lac
Y1088 (A)	4	F ⁻ Δ(lac)U169 glnVsupF hsdR (r _K ⁻ m _K ⁺) metB trpR fhuA21 proC::Tn5 (pMC9; Tet ^r Amp ^r) NOTE: pMC9 is pBR322 with lacI ^q inserted
Y1089 ^{††} (S)	4, 16	F ⁻ Δ(lac)U169 lon-100 araD139 strA hflA150::Tn10 (pMC9; Tet ^r Amp ^r)
Y1090 ^{††} (S)	4, 16	F ⁻ Δ(lac)U169 lon-100 araD139 rpsL(Str ^r) supF mcrA trpC22::Tn10 (pMC9; Tet ^r Amp ^r)

† C600 lines obtained from different sources give different results. The original strain and that obtained from the E. coli Genetic Stock Center (Yale University) are McrA⁺; derivatives traceable to the Brenner laboratory are McrA⁻ (18).

†† No isolates of these strains tested showed pleiotropic phenotypes attributed to lon (i.e. were not mucoid, formed turbid λ plaques, grew well on rich media and did not filament). The strain is unlikely to be Lon-defective.

References

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