



## E. coli strains and the NIH Guidelines

### K-12 Ancestral Strains and Derivatives

*E. coli* K-12 ancestral strains and derivatives used as host-vector systems are usually exempt from the NIH Guidelines (**Section III-F-8, Appendix C-II**). For these exempt laboratory experiments, Biosafety Level 1 (BL1) physical containment conditions are recommended. The Institutional Biosafety Committee can specify higher containment if deemed necessary.

#### Ancestral K12 Strains

Strain Designation	Origin or Collection
58	Stanford Strain
679	Stanford Strain
WG1	Wisconsin strain

#### K-12 Derivatives

Strain Designation	Origin or Collection	Strain Designation	Origin or Collection
58-161	Lab strain	MB408	Lab strain
5K	Lab strain	MC4100	Lab strain
AB284	Lab strain	MG1655	Lab strain
AB311	Lab strain	Novablue	Novagen
AG1	Lab strain	P678	Lab strain
C600	Lab strain	PA 309	Lab strain
Cavalli Hfr	Lab strain	REG-12	Lab strain
DH1	Lab strain	S17-1	Lab strain
DH5a	Lab strain	SCS-110	Stratagene
DH10B	Lab strain	SM10	Lab strain
DP50	Lab strain	STBL2	Invitrogen
EMG2	Lab strain	STBL3	Invitrogen
EPI100-T1R	Lab strain	SURE	Lab strain
H1443	Lab strain	TB1	NEB
Hfr3000	Lab strain	TG1	Lab strain
Hfr 3000 X74	Lab strain	TOP10	Invitrogen
HMS 174	Novagen	W208	Lab strain
HST08	Takara	W945	Lab strain
HT115	Lab strain	W1485	Lab strain
JC9387	Lab strain	W3110	Lab strain
JM83	Lab strain	WA704	Lab strain
JM101	Lab strain	XL1-Blue	Stratagene
JM109	Lab strain	XL10-Gold	Stratagene
KP7600	Lab strain	XL0LR	Stratagene
LE392	Lab strain	Y10	Lab Strain
M15	Lab strain	YN2980	Lab Strain

## ***E. Coli* Strains NOT Derived from K-12**

Non-pathogenic *E. coli* lab strains that are NOT derived from K-12 are not exempt from the NIH Guidelines (**NIH Guidelines III-E**). For these strains Biosafety Level 1 (BL1) physical containment conditions are still recommended. The Institutional Biosafety Committee can specify higher containment if deemed necessary.

### **Non-K12 Derivatives**

<b>Strain Designation</b>	<b>Origin or Collection</b>	<b>Strain Designation</b>	<b>Origin or Collection</b>
B	Laboratory strain	K5808	Lab strain
B-3	Laboratory strain	Mach1	Invitrogen
BL21	Novagen	Nissile 1917	Lab strain
BL23	NEB	OP50	Lab strain
B/R	Laboratory strain	Rosetta	Novagen
C	Laboratory strain	REG-811	Lab strain
C41	Sigma Aldrich	TOPP	Stratagene
C43	Sigma Aldrich	W	Lab strain
FDA strain Seattle 1946	Laboratory strain	25922	Lab strain
HB101*	Lab strain		

\* HB101 is derived from a K12/*E. coli* B hybrid

## **Pathogenic *E. coli* Strains**

Pathogenic *E. coli* strains are not exempt from the NIH Guidelines (**NIH Guidelines III-D**). For these strains Biosafety Level 2 (BL2) physical containment conditions are required. The Institutional Biosafety Committee can specify higher containment if deemed necessary.

### **Pathogenic *E. coli***

<b>Strain Designation</b>
All strains bearing K1 antigen
Diffusely adherent <i>E. coli</i> (DAEC)
Enterocaggregative strain (EAEC)
Enterohaemorrhagic strain (EHEC)
Enteroinvasive strain (EIEC)
Enteropathogenic strain (EPEC)
Enterotoxigenic strain (ETEC)
O157:H7