

IBC Approval Needed for Research Involving *E. coli* Strains

All research involving *Escherichia coli* Host-Vector Systems at the University of Michigan requires IBC approval, including K-12 lab strains and its derivatives, non-K-12 strains, and pathogenic strains. *E. coli* strains NOT derived from K-12 must be listed separately from *E. coli* K-12 strains in the Plasmid Vector section of your IBC application (Section 3-1).

Below is a list of some commonly used strains of *E. coli*, and the NIH Guidelines category applicable to those strains.

If you have any questions regarding this information, or if you have questions regarding a strain not listed, please contact IBCstaff@umich.edu.

E. coli K-12 strains and derivatives (Exempt, NIH Guideline III-F-8, Appendix C-II)

You may begin this work upon confirmation of the successful submission of your IBC application that includes this work.

58	Cavalli Hfr	Hfr3000	JM83	Novablue	STBL3	W945
58-161	DH1	Hfr3000 X74	K-12	P678	SURE	WA704
5K	DH5 α	HMS 174	KP7600	PA 309	TB1	WG1
679	DH10B	HST08	LE392	REG-12	TG1	XL1-Blue
AB284	DP50	HT115	M15	S17-1	TOP10	XL10-Gold
AB311	EMG2	JC9387	MB408	SCS-110	W1485	XL0LR
AG1	EPI100-T1R	JM101	MC4100	SM10	W208	Y10
C600	H1443	JM109	MG1655	STBL2	W3110	YN2980

Non-K12 *E. coli* strains, non-pathogenic (Not exempt, NIH Guideline III-E)

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1946	BL21	FDA Seattle 1946	Nissile 1917	TOPP
25922	BL23	HB101	One Shot	W
B	C	K5808	OP50	
B-3	C41	Mach1	REG-811	
B/R	C43	MRE 600	Rosetta	

Pathogenic *E. coli* strains (Not exempt, NIH Guideline III-D)

IBC approval required before initiating work. BSL2 containment required.

All strains bearing K1 antigen	<i>E. coli</i> enteroinvasive strain (EIEC)
Diffusely adherent <i>E. coli</i> (DAEC)	<i>E. coli</i> enteropathogenic strain (EPEC)
<i>E. coli</i> enteroaggregative strain (EAEC)	<i>E. coli</i> enterotoxigenic strain (ETEC)
<i>E. coli</i> enterhaemorrhagic strain (EHEC)	Shiga toxin producing <i>E. coli</i> (O157:H7)