

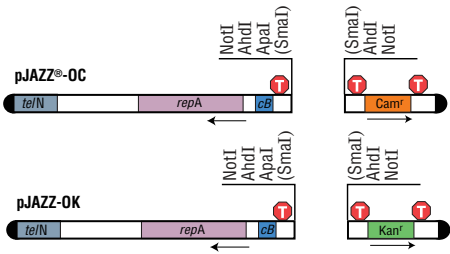

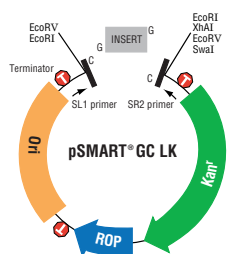
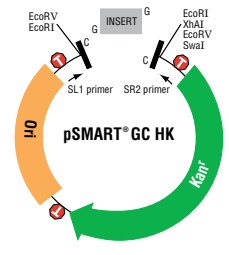
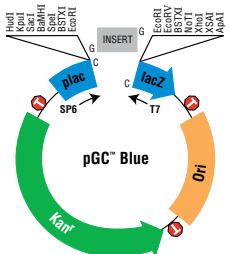
PCR Cloning Solutions

Stably clone and maintain any DNA with our transcription-free CloneSmart® technology.

- Low backgrounds (<0.1%) eliminate the need for blue/white screening, etc.
- Lucigen's exclusive CloneSmart® transcription terminators result in much greater insert stability even when cloning an otherwise deleterious sequence.
- Elimination of LacZ/ccdB genes and promoters protects the insert from transcription.

Small size means less interference with downstream applications:

- Vector size is ~2.0 kb for plasmids.

Vector	Application	Insert Size	Insert Site	Benefits	Level of Difficulty
<p>BigEasy® Long PCR Cloning Kits</p> 	<p>Very difficult DNA</p> <p>Large inserts</p>	<p>Up to 30 kb</p>	<p>C-tailed or Blunt</p>	<p>Highest fidelity cloning system known</p> <p>Stably clone any DNA</p> <p>Kanamycin selection</p>	<p>Most Problematic DNA</p>  <p>Least Problematic</p>
<p>GC Cloning & Amplification Kit with pSMART GC LK</p> 	<p>Problematic PCR products (from any PCR polymerase)</p>	<p>Up to 15 kb</p>		<p>More accurate than TOPO or TA cloning</p>	
<p>GC Cloning & Amplification Kit with pSMART GC HK</p> 	<p>General PCR cloning (from any PCR polymerase)</p>	<p>Up to 10 kb</p>	<p>C-tailed</p>	<p>Greater insert stability</p> <p>No colony screening</p> <p>No lost clones</p> <p>Includes enzymes & reagents for PCR and ligation, and cells for transformation</p>	
<p>GC Cloning & Amplification Kit with pGC Blue</p> 	<p>General PCR cloning (from any PCR polymerase)</p> <p>Optional blue/white screening</p> <p>Transcription/expression</p>			<p>Kanamycin selection</p>	

Lucigen Kit	Competent Cells	Efficiency (cfu/ug)	Size	Cat. No.	Invitrogen	Competent Cells	Efficiency (cfu/ug)	Size	Cat No
BigEasy® Long PCR Cloning Kit (pJAZZ®-OK Blunt)	BigEasy-TSA Electrocompetent Cells	≥ 4 X 10 ¹⁰	5	43054-1	No Equivalent				
			10	43054-2					
			20	43054-3					
BigEasy Long PCR Cloning Kit (pJAZZ-OK GC)	BigEasy-TSA Electrocompetent Cells	≥ 4 X 10 ¹⁰	5	43066-1	No Equivalent				
			10	43066-2					
			20	43066-3					
GC Cloning & Amplification Kit (pSMART GC LK)	10G SUPREME Electrocompetent Cells	4 X 10 ¹⁰	10	40737-1	No Equivalent				
			20	40737-2					
			10G ELITE Electrocompetent Cells	2 X 10 ¹⁰					
			20	40736-2					
	10G Chem Comp	1 X 10 ⁸	10	40738-1					
			20	40738-2					
GC Cloning & Amplification Kit (pSMART GC HK)	10G SUPREME Electrocompetent Cells	4 X 10 ¹⁰	10	40732-1	No Equivalent				
			20	40732-2					
			10G ELITE Electrocompetent Cells	2 X 10 ¹⁰					
			20	40731-2					
	10G Chem Comp	1 X 10 ⁸	5	40733-0					
			10	40733-1					
			20	40733-2					
GC Cloning & Amplification Kit (pGC Blue)	10G EC SUPREME Electrocompetent Cells	4 X 10 ¹⁰	10	40741-1	No Equivalent				
			20	40741-2					
			10G EC ELITE Electrocompetent Cells	2 X 10 ¹⁰					
			20	40742-2					
	10G Chem Comp	1 X 10 ⁸	5	40743-0	TOPO TA Cloning Kit	TOP10 EC	1 X 10 ⁹	40	K4560-40
		10	40743-1	with pCR2.1		1 X 10 ⁹	40	K4500-40	
		20	40743-2	Zero Blunt Cloning Kit with pCR Blunt		TOP10 Chem	1 X 10 ⁹	20	K2700-20
						40			K2700-40

Lucigen's GC Cloning Advantages vs Invitrogen

- Highest yields of recombinants (kits with SUPREME and ELITE cells).
- Clone larger PCR products: up to 10-12 kb vs. 2-3 kb with TOPO TA cloning.
- Much greater insert stability: Successfully clone AT-rich sequences, toxic genes and nucleotide repeats.
- No screening needed: pSMARTGC transformation efficiencies are >99%.
- Much better performance and value.

*TOPO and TA Cloning are registered trademarks of Invitrogen Corporation.

ORDER INFORMATION

PCR Cloning	Cat. No.	Size
BigEasy Long Cloning Kit (pJAZZ-OK Blunt) with BigEasy-TSA Electrocompetent Cells	43054-1	5 rxns
	43054-2	10 rxns
	43054-3	20 rxns
BigEasy Long PCR Cloning Kit (pJAZZ-OK GC) with BigEasy-TSA Electrocompetent Cells	43066-1	5 rxns
	43066-2	10 rxns
	43066-3	20 rxns
GC Cloning & Amplification Kit (pSMART GC LK) with 10G SUPREME Electrocompetent Cells	40737-1	10 rxns
	40737-2	20 rxns
	with 10G ELITE Electrocompetent Cells	40736-1 40736-2
with 10G Chemically Competent Cells	40738-1 40738-2	10 rxns 20 rxns
GC Cloning & Amplification Kit (pSMART GC HK) with 10G SUPREME Electrocompetent Cells	40732-1	10 rxns
	40732-2	20 rxns
	with 10G ELITE Electrocompetent Cells	40731-1 40731-2
with 10G Chemically Competent Cells	40733-0 40733-1 40733-2	5 rxns 10 rxns 20 rxns
GC Cloning & Amplification Kit (pGC Blue) with 10G ELITE Electrocompetent Cells	40742-1	10 rxns
	40742-2	20 rxns
	with 10G SUPREME Electrocompetent Cells	40741-1 40741-2
with 10G Chemically Competent Cells	40743-0 40743-1 40743-2	5 rxns 10 rxns 20 rxns

