Plasmid

	5’	A	C	T	amp^R gene		*lacZ* gene	C	T	G	A	A	T	T	C	C	C	C	G	G	G	T	*lacZ* gene	3’
	3’	T	G	A				G	A	C	T	T	A	A	G	G	G	G	C	C	C	A		5’

	5’	A	C	T	amp^R gene		*lacZ* gene	C	T	G	A	A	T	T	C	C	C	C	G	G	G	T	*lacZ* gene	3’
	3’	T	G	A				G	A	C	T	T	A	A	G	G	G	G	C	C	C	A		5’

	5’	A	C	T	amp^R gene		*lacZ* gene	C	T	G	A	A	T	T	C	C	C	C	G	G	G	T	*lacZ* gene	3’
	3’	T	G	A				G	A	C	T	T	A	A	G	G	G	G	C	C	C	A		5’

	5’	A	C	T	amp^R gene		*lacZ* gene	C	T	G	A	A	T	T	C	C	C	C	G	G	G	T	*lacZ* gene	3’
	3’	T	G	A				G	A	C	T	T	A	A	G	G	G	G	C	C	C	A		5’

	5’	A	C	T	amp^R gene		*lacZ* gene	C	T	G	A	A	T	T	C	C	C	C	G	G	G	T	*lacZ* gene	3’
	3’	T	G	A				G	A	C	T	T	A	A	G	G	G	G	C	C	C	A		5’

Target DNA

5’	A	C	G	A	A	T	T	C	C	C	C	G	G	G	T		C	T	G	A	A	T	T	C	C	C	C	G	G	G	T	3’
3’	T	G	C	T	T	A	A	G	G	G	G	C	C	C	A		G	A	C	T	T	A	A	G	G	G	G	C	C	C	A	5’

5’	A	C	G	A	A	T	T	C	C	C	C	G	G	G	T		C	T	G	A	A	T	T	C	C	C	C	G	G	G	T	3’
3’	T	G	C	T	T	A	A	G	G	G	G	C	C	C	A		G	A	C	T	T	A	A	G	G	G	G	C	C	C	A	5’

5’	A	C	G	A	A	T	T	C	C	C	C	G	G	G	T		C	T	G	A	A	T	T	C	C	C	C	G	G	G	T	3’
3’	T	G	C	T	T	A	A	G	G	G	G	C	C	C	A		G	A	C	T	T	A	A	G	G	G	G	C	C	C	A	5’

5’	A	C	G	A	A	T	T	C	C	C	C	G	G	G	T		C	T	G	A	A	T	T	C	C	C	C	G	G	G	T	3’
3’	T	G	C	T	T	A	A	G	G	G	G	C	C	C	A		G	A	C	T	T	A	A	G	G	G	G	C	C	C	A	5’

5’	A	C	G	A	A	T	T	C	C	C	C	G	G	G	T		C	T	G	A	A	T	T	C	C	C	C	G	G	G	T	3’
3’	T	G	C	T	T	A	A	G	G	G	G	C	C	C	A		G	A	C	T	T	A	A	G	G	G	G	C	C	C	A	5’