

Premixing the Sample

To ensure quality results, please follow the chart below as close as possible to premix templates with primers.

Sample Type	Sample Size	Template Concentration (ng/ μ l)	Template Volume Needed (μ l)	Template Amount (ng)	Primer Concentration (ng/ μ l)	Primer Volume Needed (μ l)	Total Primer Amount (ng)	diH ₂ O Volume Needed (μ l)	Final Total Volume Needed (μ l)
Plasmid	< 6 kb	~ 40 - 70	4.5	~ 250	40	2	80	5.5	12
	< 6 kb	~ 70 - 100	3	~ 250	40	2	80	7	12
	< 6 kb	~ 100-140	2	~ 250	40	2	80	8	12
	< 6 kb	~ 140 - 180	1.6	~ 250	40	2	80	8.4	12
	< 6 kb	~ 180 - 220	1.2	~ 250	40	2	80	8.8	12
	6 - 10 kb	~ 50 - 80	4.6	~ 300	40	2	80	5.4	12
	6 - 10 kb	~ 80 - 120	3	~ 300	40	2	80	7	12
	6 - 10 kb	~ 120 - 160	2	~ 300	40	2	80	8	12
	6 - 10 kb	~ 160 - 200	1.6	~ 300	40	2	80	8.4	12
	6 - 10 kb	~ 200 - 240	1.4	~ 300	40	2	80	8.6	12
> 10 kb	~ 90 - 110	3.5	~ 350	40	2	80	6.5	12	
Purified PCR Products	< 1 kb	~ 5 - 15	3	~ 30	40	2	80	7	12
	< 1 kb	~ 20 - 30	1.2	~ 30	40	2	80	8.8	12
	> 1 kb	~ 15 - 25	4	~ 80	40	2	80	6	12
	> 1 kb	~ 35 - 45	2	~ 80	40	2	80	8	12

* To ensure optimal results, we highly recommend the use of diH₂O in place of TE buffer.

** For primers of 20 bases, a molar concentration of 1.5 μ M (1.5 pmole/ μ l) corresponds to a mass concentration of 10 ng/ μ l.

*** For plate orders, please add samples vertically (from A1 to H1).

For questions please contact us at support@etonbio.com