



Custom primer requirements and universal primers

Custom primers can be designed and synthesised by LGC. Primers supplied by the customer must meet the following requirements:

- Length of 18 - 25 bases
- No wobble bases
- GC-content of at least 40%
- The annealing temperature must be $T_m - 3$ and should be at least 52°C
- To calculate T_m please use $T_m = 4x(G+C) + 2x(A+T)$
- 3'- end should be G or C
- No self-hybridisation (primer dimer, loops) or binding to several sites on the template
- **For Ready2 Run:** Primer concentration $5 \mu\text{M} \pm 5 \text{ pmol} / \mu\text{L}$
- **For Flexi Run:** We recommend to ship stock solutions (100 μM) dissolved in ultrapure water. Please **specify the concentration on the tube.**
- Deprotected
- Without modifications (fluorophore or others)
- Free of salts and other contaminants.

All universal primers listed below are available free of charge.

Primer	Sequence (5'-3')
1492R	GGYTACCTTGTTACGACTT
27F	GAGTTTGATCMTGGCTCAG
35S-R	GGATTTTAGTACTGGATTTTGG
3AOX	GCAAATGGCATTCTGACATCC
519F	CAGCAGCCGCGGTAATAC
5AOX	GACTGGTTCCAATTGACAAGC
926R	CCGTCAATTCCTTTGAGTTT
Ac5-forw	GACACAAAGCCGCTCCATCAG
ACT2-R	AAGATTGAACTTAGAGGAG
AS2-1-R	ACCTACAGGAAAGAGTTACTC
ASK-FN2	CGGCCTTTTTACGGTTCCTG
BAD24-F	CTCTACTGTTTCTCCATACC
BAD-HisA-F	GGTATGGCTAGCATGACTGG
BAD-HisA-R	GTTTTATCAGACCGCTTCTG
BeloF	TTGTAACGACGGCCAGTG
BluescriptR	GGAAACAGCTATGACCATG
CAM-R	CACAATCCCACTATCCTTCG
CaMV	CCACGTCTTCAAAGCAAGTG
CMV5-R	AGAAGGACACCTAGTCAGAC
CMV-F	CGCAAATGGGCGGTAGGCGTG
Donr-F	TCGCGTTAACGCTAGCATG
EGFP-C1-F	GAAGCGCATCACATGGTC



Primer	Sequence (5'-3')
EGFP-C1-R	AACCATTATAAGCTGCAATAAAC
EGFP-N1-F	GAGGTCTATATAAGCAGAGC
EGFP-N1-R	ACTTGTGGCCGTTTACGTC
ENTR-F	GTTAGTTAGTTACTTAAGCTCG
ENTR-R	CCAGAGCTGCAGCTGGATG
F1-oriR	CAGAATAGAATGACACCTAC
ForalphaFactor	TTCGATGTTGCTGTTTTGCC
Gal10-R	CAAGGTAGACAAGCCGACAAC
Gal1forw	TATACCTCTATACTTTAACGTC
GEX-F	CTTTGCAGGGCTGGCAAG
GEXnew	CACAAATTGATAAGTACTTG
GEX-R	GAGCTGCATGTGTCAGAGG
GL2	CTTTATGTTTTTGGCGTCTTCC
GL3	TTTGTATTTCAGCCCATATCG
HCO-2198	TAAACTTCAGGGTGACCAAAAAATCA
hGFP-R	TCCATTTCATCAGTTCCATAG
IREShygR	GACAAACACACACCGGCCTT
IREShygRn	CAGACCTTGCATTCTTTGG
ITS1	TCCGTAGGTGAACCTGCGG
ITS4	TCCTCCGCTTATTGATATGC
lacZ93	CGCCAGCTGGCGAAAGGG
LCO-1490	GGTCAACAAATCATAAAGATATTGG
M13-21F	TGTAACACGACGGCCAGT
M13-24F	CCAGGGTTTTCCCAGTCACG
M13-24F-BLUE	GTAACACGACGGCCAGTGAGCGCG
M13-24R	CGGATAACAATTCACACAGG
M13-24R-BLUE	AACAGCTATGACCATGATTACGCC
M13-29R	CAGGAAACAGCTATGACC
M13rev2	GAGTTAGCTCACTCATTAGG
MKSF	CCAGGCTTTACACTTTATGCTTCC
pAD-Gal4-AD	GTTTGGAATCACTACAGGGATG
pBR-F	AGTGCCACCTGACGTCTAAG
pcDNA3.1-R	TAGAAGGCACAGTCGAGGCT
pcDNA-Dest53-for	GATTACACATGGCATGGA
pcDNA3.3-TOPOseqrev	CTTCCGTGTTTCAGTTAGCCTC
pCEP4for	GCGTGTACGGTGGGAGGTCTATATA
pConG1seq1	GAAGACTTAAGGCAGCGGCAGAA
pConKseq1	GTAGTCTGAGCAGTACTCGTTGC
pDest17	ACCACAACGGTTTTCCCTCTA
pEE12.4_seqrev3	TACCTACCAGTTCTGCGC
pee13.4seqrev	TGCATTCATTTTATGTTTCAGGT



Primer	Sequence (5'-3')
pEFmyccyto-F	TCTCAAGCCTCAGACAGT
pelb3	GCGCCAATTCTATTTCAAGG
pETBlueDOWN	GTAAATTGCTAACGCAGTCAG
pETBlueUP	GTCACGACGTTGTAAAACGAC
pET-T7up	CGGTGATGTCGGCGATATAG
pFASTBacF	ATTAATGATAACCATCTCGC
pFASTBacR	TCAGGTTTCAGGGGGAGGT
pG4seq2r	GTTTCAGCCAGTCCTGGTGCA
pGAD10-F	TACCACTACAATGGATGATG
pGEX3	CCGGGAGCTGCATGTGTCAGAGG
pGEX5	GGGCTGGCAAGCCACGTTTGGTG
PICZ-F	TACTATTGCCAGCATTGCTGC
pIRES-BF	CTTTACATGTGTTTAGTCGAG
pJET1.2-F	CRACTACTATAGGGAGAGCGGC
pJET1.2-R	AAGAACATCGATTTTCCATGGCAG
pJET-fw	GCCTGAACACCATATCCATCC
pKS-Fup	TGCGCAACTGTTGGGAAGG
pMAL-R	CCGCAGATGTCCGCTTTCTG
pQE-F	CGGATAACAATTTACACACAG
pQE-Fup	ACGAGGCCCTTTTCGTCTTC
pQE-R	GTTCTGAGGTCATTAAGTGG
pSuper-retro-S	GGAAGCCTTGGCTTTTG
Ptac	TCAGGCAGCCATCGGAAGCTG
pUCF	GCCAGTGAATTCGAGCTCGG
pUCR	TGCCTGCAGGTCGACTCTAG
pUCT7-Rn	TTCAGGCTGCGCAACTGTTG
pYES-F	ATTGTTAATATACCTCTATAC
RVpr3	CTAGCAAAATAGGCTGTCCC
RVpr4	GACGATAGTCATGCCCGCG
sCOS1F	CAAATAGGGGTTCCGCGCAC
SeqL-E	GTTGAATATGGCTCATAACAC
Sp6-20	CTATTTAGGTGACACTATAG
SP6-CS2	CTTGATTTAGGTGACACTATAG
SP72-F	TGAGAGTGCACCATATGGAC
SV40	CACTGCATTCTAGTTGTGGTT
SV40-Do	CAGAAGTAGTGAGGAGGC
T3	AATTAACCCTCACTAAAGGG
T7cos1	GCATAATACGACTCACTATAGG
T7-CS2	TAATACGACTCACTATAGTTC
T7prom	TAATACGACTCACTATAGG
T7term	GCTAGTTATTGCTCAGCGG



Primer	Sequence (5'-3')
Topo-1	TCGGATCCACTAGTAACG
Topo-2	GTGTGATGGATATCTGC
TrcHis-F	GAGGTATATATTAATGTATCG
TrcHis-R	GATTTAATCTGTATCAGG
TRE-F	CTCGTTTAGTGAACCGTCAG
UniV5his-R	GGCACGGGGGAGGGGCAAAC
V5C-termR	GAGGAGAGGGTTAGGGATAG
VP16-AD	CTACGGCGCTCTGGATATG
YES2-R	GCGTGAATGTAAGCGTGAC

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