

CLONING SERVICES

CUSTOM CDNA PREPARATION

CAT# SBM010

Introduction:

We provide preparation of high-quality amplified cDNA enriched in full-length sequences from a small amount of starting material.

You provide:

Minimum 0.5 µg of total RNA or poly(A+) RNA

Turnaround time:

4 weeks

We perform:

1. First-strand cDNA synthesis
2. cDNA amplification

Price (in US\$):

1,000

You will receive:

- Any leftover starting materials (upon request);
- First-strand cDNA (with specific adapters on both ends);
- Amplified double-stranded cDNA (at least 1 µg);
- PCR primers for cDNA amplification;
- cDNA amplification report.

CUSTOM PCR AND RT-PCR CLONING

CAT# SBM020

Introduction:

We provide design and synthesis of primers for PCR amplification of target sequences from DNA / cDNA source, cloning of PCR products into a bacterial vector and purification of the vector DNA with target inserts. Target fragments are confirmed by direct sequencing.

You provide:

- Vector and vector map
- Sequence information
- Starting material, i.e. cDNA, RNA, genomic, phage, plasmid or cosmid DNA

Turnaround time:

6 weeks

We perform:

1. Construction of oligonucleotide primers for PCR amplification;
2. cDNA synthesis and amplification (if required);
3. Amplification of target fragment;
4. Cloning of fragment into the standard pUC-based vector;
5. Clone confirmation:
 - Option 1: Clone confirmation by sequencing in one direction;
 - Option 2: Sequence verification of the perfect coincidence between sequence of the insert and customer provided sequence;
6. Plasmid purification of a single correct clone (from 5-10 ml culture volume);

Price (in US\$):

Fragment length	Option 1	Option 2
less than 2 kb	\$700	\$1,000
less than 3 kb	\$1,000	\$1,500
larger than 3 kb	please inquire	

You will receive:

- Any leftover starting materials (upon request);
- First-strand cDNA (with specific adapters on both ends);
- Amplified double-stranded cDNA (at least 1 µg);
- PCR primers for cDNA amplification;
- cDNA amplification report.

CLONING SERVICES

CUSTOM SUBCLONING

CAT# SBM030

Introduction:

We clone inserts into bacterial vector of choice. We can produce various expression constructs from the initial plasmid, modify an existing construct, and / or generate constructs for use in chimeric / fusion protein production. All products are confirmed by either restriction digest or direct sequencing.

You provide:

- Insert DNA
- Vector and vector map

Or you can provide a nucleic acid sample (total RNA, poly(A+) RNA, cDNA or DNA) and sequence data for us to obtain the target insert.

Turnaround time:

3 weeks (for 1 kb gene)

We perform (some or all of following):

- ✓ Restriction digests to excise target DNA and isolation of obtained fragment;
- ✓ Generate inserts by PCR;
- ✓ Modification of DNA fragment; i.e. add linker
- ✓ Ligation of fragment into appropriate vector;
- ✓ Transformation into *E. coli*;
- ✓ Selection of correct clone by restriction analysis or sequencing;
- ✓ PCR of DNA segment of known sequence;
- ✓ Verification of the size / orientation by restriction analysis;
- ✓ Small-scale plasmid purification of one correct clone

Price (in US\$):

Please inquire

You will receive:

- Any leftover starting materials (upon request);
- Purified target insert in the selected vector;
- Report on subcloning procedure.

CUSTOM GENOME WALKING

CAT# SBM040

Introduction:

We provide rapid cloning of promoters and other upstream regulatory elements of selected genes using genome walking based on suppression PCR effect.

You provide:

- Minimum 1 µg of genomic DNA
- Minimum 50 bp sequence of gene of interest

Turnaround time:

4 weeks (for 1 kb gene)

We perform:

1. Construct oligonucleotide primer based on provided sequence;
2. Amplification of target gene regions;
3. Cloning of target DNA regions into appropriate vector;
4. Partial sequencing of cloned DNA fragments.

Price (in US\$):

1,000 (up to 1 kb gene)

You will receive:

- Any leftover starting materials (upon request);
- Each genome walking generated PCR product (at least 1 µg);
- Purified vector DNA with target insert;
- Primers designed and synthesized during genome walking;
- Report on genome walking including all sequence data.

CUSTOM FULL-LENGTH cDNA ISOLATION**CAT# SBM050**

Introduction:

We provide isolation of full-length cDNA even when only partial nucleotide or amino acid sequence is available. We use RACE technology to generate the target product with no background noise. We have successfully applied the method to total RNA, poly(A+) RNA and even when only a short nucleotide or protein sequence was available.

You provide:

- Minimum 1 µg of total RNA or poly(A+) RNA;
- Minimum 50 bp nucleotide sequence, or
- Minimum 15 amino acid sequence of target

Turnaround time:

5 weeks (for 1 kb sequence)

We perform:

1. First-strand cDNA synthesis from provided RNA;
2. Construct oligonucleotide primer based on provided sequence data;
3. Amplification of target cDNA ends (3' and 5' RACE);
4. Cloning of target cDNA ends into appropriate vector;
5. Partial sequencing of cloned cDNA fragments;
6. Construct oligo primers to amplify target full-length cDNA;
7. Amplification of target full-length cDNA;
8. Clone target full-length cDNA into appropriate vector;
9. Screen obtained clones to select those containing target full-length cDNA inserts;
10. Purification of vector DNA with target full-length cDNA insert.

Price (in US\$):

1,500 (up to 1 kb sequence)

You will receive:

- Any leftover starting materials (upon request);
- First-strand cDNA sample (upon request);
- Amplified double-stranded cDNA;
- PCR primers for cDNA amplification;
- 0.5 µg of each PCR product generated by RACE;
- 1 µg of target full-length cDNA;
- Purified vectors containing PCR products generated by RACE;
- Purified vectors containing target full-length cDNA insert;
- Primers designed and synthesized during RACE;
- Report on full-length cDNA isolation.