



OriGene Technologies, Inc.

High-throughput “Longest-Clone” cDNA Library Screening Service

Overview of Service

OriGene will perform a simultaneous screening of a 12-tissue cDNA library panel. The 12 individual OriGene cDNA libraries, derived from major human tissues, have been size-selected to enrich for long cDNAs and have been subjected to rigid analysis to assure high quality. The simultaneous screening of a 12-tissue panel, containing a total of about 6 million size-selected clones, increases the probability of isolating a full-length clone. OriGene provides the longest clone obtained from our screening, but does **not** guarantee that it will be full-length.

In the initial screen, using PCR primers provided by the investigator, OriGene will determine whether clones could be identified in any of the 12 tissue-specific libraries. If no clone could be identified, the investigator will receive a full refund and the service will be terminated. If the initial screening is successful, OriGene will determine the relative sizes of the cDNA clones and proceed to isolate the longest clone. Restriction enzyme digestion will be performed on miniprep DNA prepared from the clone to confirm its purity and to determine the size of the cDNA insert. An aliquot of the miniprep DNA, together with a picture of the ethidium-bromide-stained agarose gel, will be provided to the investigator.

Clones obtained as a result of this service are the sole property of the investigator. OriGene will **not** determine the sequence of the cDNA clone, except for quality control reasons or unless requested by the investigator under a separate service contract. All information and materials provided by the investigator are held in strict confidence.

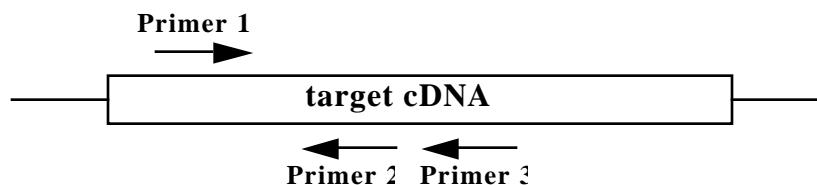
Currently Available cDNA Libraries

Human Rapid-Screen™ cDNA Library Panels: brain (adult), brain (fetal), heart, kidney, liver, lung, muscle, peripheral blood leukocytes (PBL), placenta, small intestine, spleen, and testis.

Items to be Provided by the Investigator

To perform the service, the following are requested from the investigator:

1. Set of exonic PCR primers* (primer 1, 2, 3) 10 nM:



*Design of PCR primers:

- length 20-25 nt long
- average G/C content (50-55%)
- G/C's evenly distributed
- no internal base pairing
- seal 3' end with a G/C
- definitely no more than 3 G's in a row
- preferably no more than 3 C's in a row
- the primers should (preferably) be ~500 bp apart
- the primer locations should facilitate extension of the cDNA sequence (i.e. derive primers from extreme 5' end of known sequence if you are looking to identify more upstream sequences)

2. Positive control DNA:

- positive control DNA ($\geq 1\mu\text{g}$)
(cDNA clone from which the PCR primers were designed)
- expected size of PCR products
(primers 1 and 3, and primers 1 and 2)

3. Information on the target gene:

- expected size of target mRNA in Northern blot (optional)
- expected sites of expression of target mRNA (optional)
- sequence of EST or incomplete cDNA used to generate the PCR primers (only if deemed appropriate)

Cost of OriGene's "Longest-Clone" Screening Service

The cost for isolation of the longest cDNA clone from screening 12 human tissue cDNA libraries (about 6 million clones), using gene-specific primers provided by the customer, is \$3,500.00. There is no charge if OriGene fails to isolate a clone.

Cost for designing, synthesizing and testing gene-specific primers 1, 2, 3 for customer will be an additional \$300.00.

Item	Catalog#	Price
* Human Rapid-Screen cDNA Library Screening Service	HRSS-001 (A+B)	\$3500
A. Screening the Human Master Plates for longest clone	HRSS-001A	\$2000
B. Screening sub-plate for final clone	HRSS-001B	\$1500
* Mouse Rapid-Screen cDNA Library Screening Service	MRSS-001 (A+B)	\$3500
A. Screening the Mouse Master Plates for longest clone	MRSS-001A	\$2000
B. Screening sub-plate for final clone	MRSS-001B	\$1500
Rapid-Screen Primer Design	RSPD-001	\$300

* The full-screening service includes two parts, A and B, which may be ordered under a single catalog number. However, for your convenience, A and B may be ordered simultaneously under separate catalog number.

Order Form

OriGene Technologies, Inc.
"Longest-Clone" cDNA Screening Service

Fax to OriGene at 1-301-340-9254

Investigator:

Company/Institution:

Purchase Order #:

Mailing Address:

Billing Address:

Phone:

Fax:

E-mail:

Required Materials to Perform Screen:

1. Three exonic PCR primers constructed as per Screening Service guidelines (please see primer design guidelines on previous page)
2. Positive control DNA (cDNA clone from which primers were designed)

Optional Information about Target Gene:

3. Nucleotide sequence of the three exonic primers provided
 - Expected size of target mRNA as determined by Northern blot analysis
 - Location of primers in relation to the 5' and/or the 3' ends of target mRNA
 - Expected site(s) of expression of target mRNA (tissues: brain (adult), brain (fetal), heart, kidney, liver, lung, muscle, peripheral blood leukocytes (PBL), placenta, small intestine, spleen, and testis)
 - Sequence of EST or incomplete cDNA used to generate the PCR primer