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Product Analysis Certificate

RAT TISSUE FULL-LENGTH cDNA

FOR RESEARCH USE ONLY

Description: The Full-Length cDNA is tissue-specific, double-stranded cDNA ready for rapid amplification of full-length target genes. The Full-Length cDNA is ideal for amplifying your gene of interest using gene-specific primers. You can see if your gene of interest is expressed in a particular tissue, or use multiple Full-Length cDNAs to profile expression across several different tissues.

To prepare the Full-length cDNA, mRNA was isolated from the specific tissue indicated and normalized using gene enrichment technology (patented). The subsequent PCR amplification completes the enrichment process.

Package Contents: **Size: 10 reactions**

10 μ l the Full-Length cDNA (10 ng/ μ l) (Included)
Control β -actin gene primer Mix (10 μ M) (Optional)

Additional Materials Recommended

- Large cDNA Amplification Kit
- DNA size markers (1-kb DNA ladder)
- 1.1% agarose gel containing 0.1 mg/ml ethidium bromide

Storage: Store at 70°C or lower. The Full-Length cDNA is stable for 1 year. Avoid multiple freeze/thaw cycles. Working solutions can be stored at 20°C for up to 3 months, or at 4°C for 2 weeks.

Shelf Life: 1 year from date of receipt under proper storage conditions.

Shipping Conditions: Dry Ice

Quality Control: A sample of this lot of Large Full-length cDNA was amplified by PCR for 30 cycles using the control primer mix and the Large cDNA Amplification Kit. The final product was electrophoresed on an agarose/ethidium bromide gel, and a band was observed at ~ 900 bp.

WARRANTY

We WARRANTS THAT THE MATERIALS SOLD MEET OUR PERFORMANCE SPECIFICATIONS FROM THE TIME OF SHIPMENT UNTIL THE EXPIRATION DATE, IF STORED UNDER THE RECOMMENDED CONDITIONS. NO OTHER WARRANTIES OR GUARANTEES, EXPRESSED OR IMPLIED, ARE PROVIDED, INCLUDING WARRANTIES FOR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. UNDER NO CIRCUMSTANCES SHALL WE BE LIABLE FOR ANY DAMAGES ARISING OUT OF THE USE OF THE MATERIALS.

(PAC0014)

INSTRUCTIONS FOR USE

A. Combine the following reagents in a PCR tube suitable for use in a thermal cycler:

- 1 μ l Large Full-Length cDNA
- 2 μ l Control or gene-specific primer mix (25 μ M)
- 5 μ l 10X GET cDNA Amplification Buffer
- 2 μ l dNTP Mix (10 mM each)
- 39 μ l PCR-grade water
- 1 μ l cDNA amplification enzyme
- 50 μ l Final volume**

B. Choose the best cycling parameters for your target primer set:

The following PCR parameters have been optimized using GeneAmp 2400/9600 thermal cyclers. Different thermal cyclers may require different PCR conditions. Please adjust parameters for the thermal cycler you will be using.

- For primers with a T_m 70°C:
 - 1 cycle 96°C 20 sec
 - 3035 cycles^a: 96°C 6 sec
 - 68°C 3 min^b

- For primers with a T_m 70°C:
 - 1 cycle 96°C 20 sec
 - 3035 cycles^a : 96°C 6 sec
 - (T_m 2°C)^c 1 min
 - 72°C 3 min^b

NOTES:

- ^a If you are amplifying genes with multiple copies per cell, then use a target of 30 cycles. If you are amplifying genes that contain a single copy per cell, then use a target of 35 cycles.
- ^b We recommend using 1 min per kb for extension. For example, a 3-min extension period is designed to amplify a 3-kb gene fragment.
- ^c If the gene-specific primers have a T_m less than 70°C, then subtract 2°C to obtain the appropriate annealing temperature.

C. Electrophoresis

Run the final PCR product on a 1.1% agarose/ethidium bromide gel alongside a suitable size marker. For the control gene, you should observe a visible band at ~900 bp when you view the gel under UV light.

Notice to Purchaser

Gene Enrichment Technology is patented for applications by Genemed.
PCR process is covered by U.S. Patents owned by Roche Molecular Systems, Inc. and F. Hoffmann-La Roche Ltd.
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