

## Certificate of Analysis

**Product Name:**

- Total RNA
- Human Tumor Total RNA Matched Pair (PP/PM)
- mRNA

Catalog No.: RXXXXXXX  
Catalog No.: R8235XXX-PP/PM  
Catalog No.: MXXXXXXX

**Storage Condition:** -70°C**Shipping Condition:** Dry Ice**Shelf Life:** Half a year from the date of receipt under proper storage condition**Description**

- **Total RNA** is isolated by modified guanidine thiocyanate techniques and stored in RNA storage buffer.
- **Human tumor matched pair total RNA (PP/PM).** Products include: Primary Pair (PP), or Primary and Metastatic Pair (PM). PP consists of total RNA isolated from primary tumor and its adjacent normal tissue; PM consists of total RNA from primary tumor and corresponding metastatic tumor. Total RNA in each pair is prepared from the same donor. This product line is designed for identifying tumor-specific genes and tumor metastatic genes.
- **mRNA** is purified from high quality of total RNA using a modified Oligo (dT) cellulose method and stored in DEPC treated water. Total RNA is isolated by a modified guanidine thiocyanate method.

**Quality Control**

- **Total RNA**
  1. The integrity of the RNA is examined by visual inspection for the presence of intact bands of 18s and 28s ribosomal RNA when electrophoreses on a denaturing agarose gel. The quality and purity of total RNA were tested by spectrophotometer.  $A_{260/280}$  is between 1.8 and 2.0 (detected in 10 mM Tris-HCl, pH 7.5).
  2. The RNA is treated by DNase I, and is tested as DNA free RNA by PCR.
  3. cDNA synthesis is successfully performed by using this RNA as template.
- **mRNA:**
  1. The quality and purity of mRNA is tested by spectrophotometer.  $A_{260/280}$  is between 1.8 and 2.0 (detected in 10mM Tris-HCl, pH 7.5).
  2. The integrity of mRNA is checked by electrophoresis on a denaturing agarose gel with a smear from 0.5 Kb up to more than 9.0 Kb.

**Note:**

1. Total RNA from some rare tissues and tumor tissues may not be treated by DNase I
2. To visualize the RNA images on agarose gel, we recommend the same gel system be used as Biochain's (1% agarose gel in 1xMOPS buffer with formaldehyde). Biochain is not responsible for customer's getting degraded RNA images from other gel systems, such as TAE gel, TBE gel, Urea gel, etc.
3. RNA concentration should be measured in 10 mM Tris-HCl, pH 7.5, RNA concentration may vary if it is detected in other solutions, such as DEPC water.

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