

# Certificate of Analysis

**Product Name:**

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

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

**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 a primary tumor and its adjacent normal tissue; PM consists of total RNA from a 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 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.
- **FFPE Total RNA** FFPE Total RNAs are isolated from Formalin Fixed Paraffin Embedded materials.

**Quality Control**

- **Total RNA**
  1. The integrity of the RNA is tested by Agilent's TapeStation with 28S/18S ratio  $\geq 0.7$  and RIN  $\geq 5$ . The quality and purity of total RNA were tested by spectrophotometer.  $A_{260/280}$  is between 1.8 and 2.1 (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 a template.
- **mRNA:**
  1. The quality and purity of mRNA is tested by spectrophotometer.  $A_{260/280}$  is between 1.8 and 2.1 (detected in 10 mM 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.
- **FFPE Total RNA:**

The purity of RNA is tested by spectrophotometer.  $A_{260/280}$  is between 1.8 and 2.1

**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 1% agarose gel in 1xMOPS buffer with formaldehyde. BioChain is not responsible for customers 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 detected in other solutions, such as DEPC water.

**FOR IN VITRO RESEARCH USE ONLY****APPROVED BY** \_\_\_\_\_