Cell-Mate 3D™

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RNA Isolation Kit

Extract RNA from 3D cultures with Cell-Mate3D™ RNA Isolation Kit without ceramic beads - RXT1001

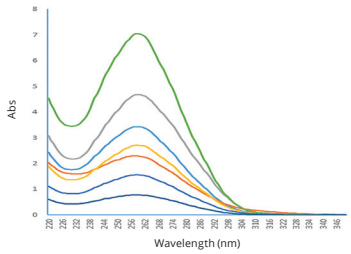
Optimized RNA Extraction from Cell-Mate3D™ Cultures

Reagents and workflow are optimized for efficient RNA isolation and recovery from Cell-Mate3D™ cultures. Protocol is derived from methods extracting RNA from polysaccharide rich tissues. [1,2,3]

Efficient RNA Isolation & Recovery

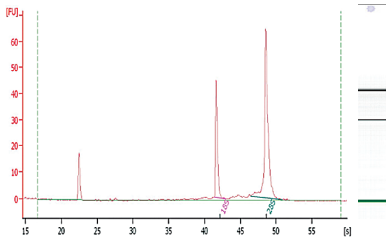
Cell-Mate3D™ has unique chemical and physical properties such that common RNA isolation kits are not suitable for RNA extraction.

Isolate RNA with Minimal Protein Contamination



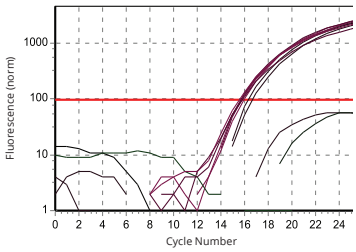
Nanodrop spectra of isolated RNA from 7 individual Cell-Mate3D™ samples with varying cell densities. The total RNA yield represented range from 1.8µg to 16.8µg.

Obtain High Quality RNA after Qiagen® RNA Cleanup*



Agilent Bioanalyzer electropherogram depicting high quality total RNA isolated from Cell-Mate3D™ culture followed by Qiagen® RNA clean-up. Note clearly delineated 28S and 18S peaks and minimal low molecular weight noise. rRNA Ratio 28S/18S=2.2.

Synthesize cDNA and Perform q-RT PCR



q-RT-PCR amplification plot demonstrating GAPDH expression. RNA was isolated from Cell-Mate3D™ cultures and converted to cDNA. 200ng of cDNA per well was used in each q-RT-PCR reaction. Technical triplicates were performed. Average CT value was 15.5.

Analyze RNA Expression Using Downstream Applications

RT-PCR* ○ qRT-PCR* ○ RNA Seq* ○ Other RNA based assays

Ordering Information

VWR Cat. No.	BRTI Cat. No.	Description	Size	Qty/PK
76036-002	RXT-1001	RNA Isolation Kit without ceramic beads	30 rxn	1

References

1.) Gasic K, Hernandez A, and Korban SS (2004) RNA Extraction From Different Apple Tissues Rich in Polyphenols and Polysaccharides for cDNA Library Construction. Plant and Molecular Biology Reporter 22:437a-437g. 2.) Ding L-W, Sun Q-Y, Wang Z-Y, Sun Y-B and Xu Z-F (2008). Using Silica Particles to Isolate Total RNA From Plant Tissues Recalcitrant to Extraction in Guanidine Thiocyanate. Analytical Biochemistry 347:426-428. 3.) Kistner C and Matamoros M (2005) RNA Isolation Using Phase Extraction and LiCl precipitation. Lotus japonicus Handbook. pp. 123-124. *Additional cleanup may be required (ie, Qiagen® RNA Cleanup) depending on downstream application. Qiagen® is a registered trademark of Qiagen N.V.

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