

CONTAMINATION DETECTION

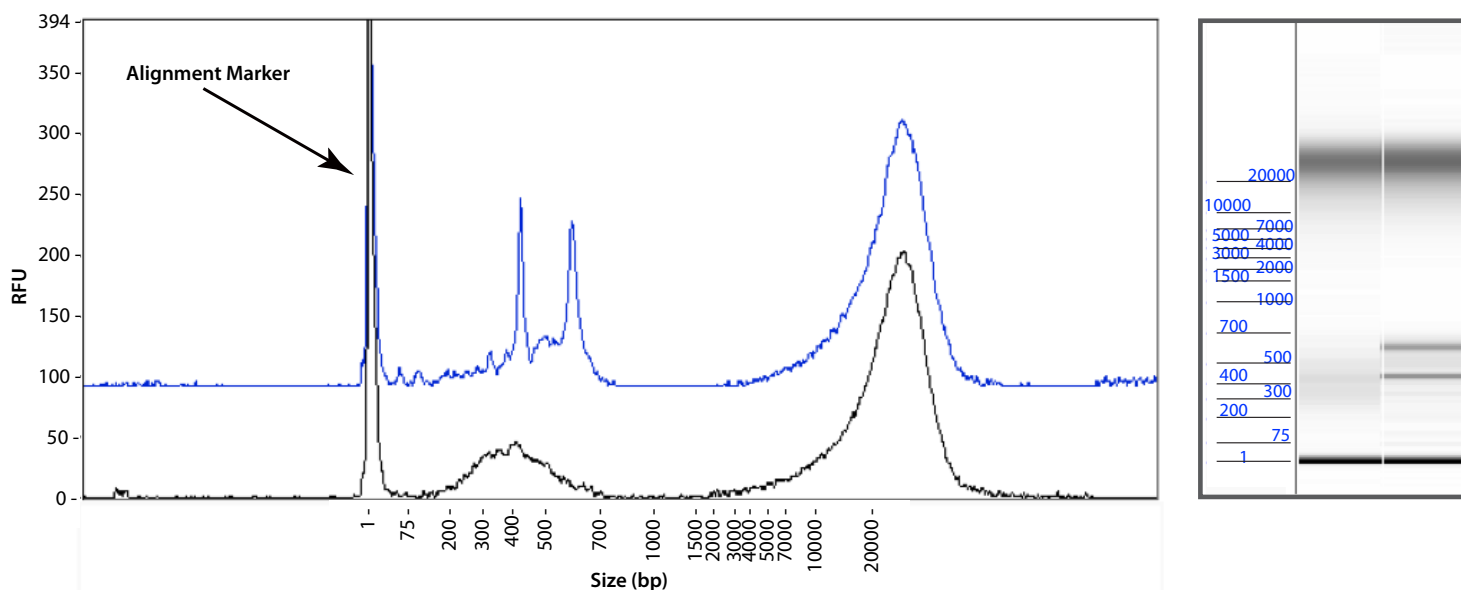
Fragment Analyzer™ Automated CE System

Identify contamination in nucleic acid samples.

See unwanted RNA in your genomic DNA extractions

Research labs now performing gDNA analysis should be aware that RNA contamination may be present in their samples. With extraction methods varying from lab to lab, the latent possibility of co-extracted RNA could interfere with downstream experiments.

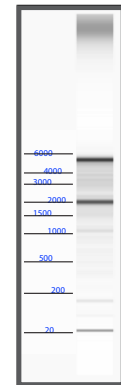
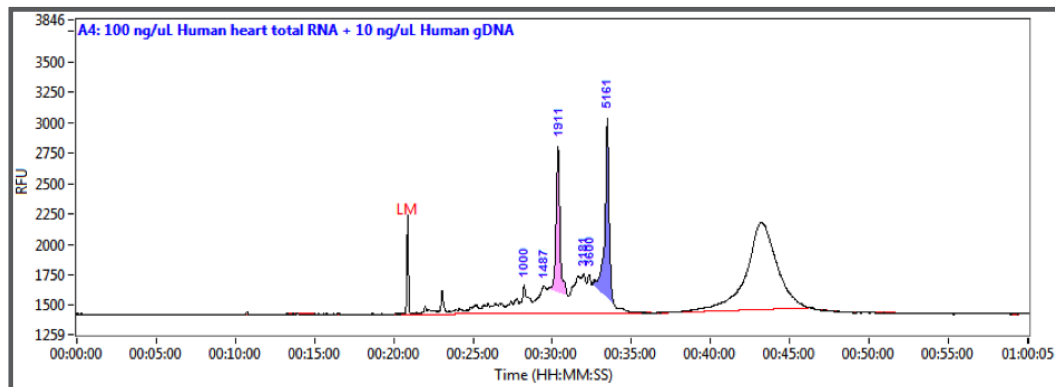
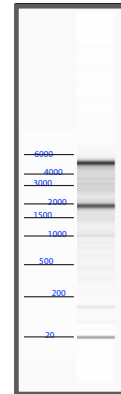
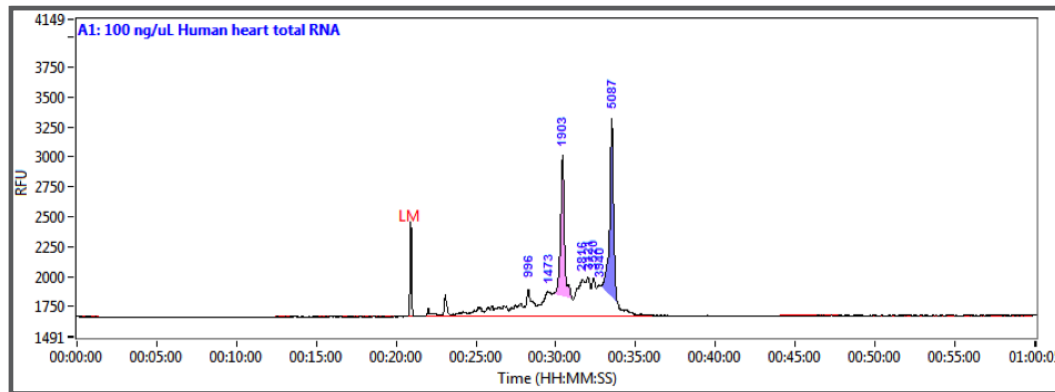
The Fragment Analyzer™ allows you to see this problem before proceeding to the next step. Despite the presence of contaminants, the Fragment Analyzer™ still clearly identifies the intact gDNA both qualitatively and quantitatively.



Human genomic DNA sample spiked with total RNA (top trace) or messenger RNA (bottom trace). RNA contamination is observed as peaks or smears in the size region from 50 to 1000bp. Note that alignment marker at far left is set to 1bp. The intact gDNA can be found in the 20,000bp region. The corresponding digital gel image is shown to the right of the electropherogram.

See unwanted gDNA in your RNA extractions.

RNA research is the new frontier of discovery in life science. Labs that once analyzed dozens of RNA samples a week may now analyze hundreds or even thousands. With these increased volumes, it's important to ensure RNA experiments can proceed with confidence by knowing there are no genomic DNA contaminants in the RNA extraction. The Fragment Analyzer™ accomplishes that.



Human heart total RNA electropherograms measured by the Fragment Analyzer™. Top panel shows RNA sample without gDNA; bottom panel shows gDNA contamination in the peak to far right. Blue peak corresponds to the 28S region; red peak corresponds to 18S region.

Advanced Analytical Technologies, Inc.

2711 South Loop Drive, Suite 4150
Ames, IA 50010 USA
Phone: +1-515-296-6600
Fax: +1-515-294-7141
E-mail: sales-fs@aati-us.com
www.aati-us.com

Advanced Analytical Technologies, GmbH.

Im Neuenheimer Feld 583
D-69120 Heidelberg
Phone: ++49 6221 868058-20
Fax: ++49 6221 868058-99
E-mail: sales-fs@aati-de.com
www.aati-de.com

