

APPLICATION NOTE

Saliva RNA Sample Collection & Stabilization Kit

Simultaneous DNA/RNA isolation from preserved saliva samples Saliva, the most accessible and non-invasive biofluid of our body, harbours a wide spectrum of biological analytes informative for clinical diagnostic applications. Recently, human RNA obtained from saliva was shown to be a biomarker for several diseases.

Canvax has developed a complete system that uses saliva as the **sample source for gene expression studies** and introduces the possibility of isolating genomic DNA from the same sample.

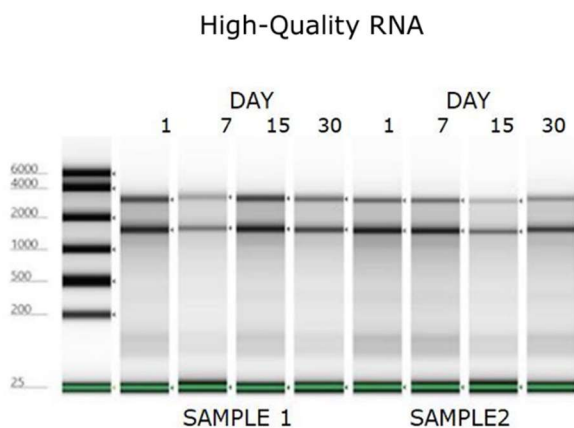
1. **Saliva RNA Sample Collection & Stabilization Kit** provides a safe and rapid all-in-one procedure for the collection, stabilization and transportation of **1 ml saliva samples at ambient temperature that stabilizes RNA from the moment of collection for 1 month:**

- > Easy collection, transportation and processing.
- > Sample volume: 1 ml saliva
- > Sample remains stable for 1 month at RT, reducing transportation and storage costs.
- > Painless, non-invasive collection.
- > Samples can be mailed using the standard postal system.
- > Human mRNA expression profiling.

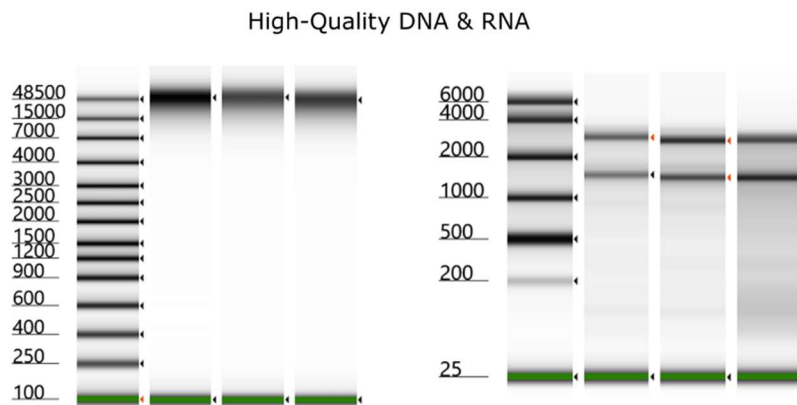
2. **HigherPurity™ Saliva Total RNA Extraction Kit** has been designed for a fast and efficient purification of **total RNA from preserved saliva samples**. The process includes a cell lysis with proteinase K followed by a precipitation of the proteins and part of genomic DNA.

Later, by a precipitation with isopropanol, total RNA is obtained, which is finally rehydrated. Finally, for **removal of genomic DNA contamination** is used an approach consisting of two sequential filtrations with different MiroSpin columns.

- > Buffer-based RNA isolation combined with gDNA removal with columns.
- > Sample volume: 600 µl of preserved saliva sample.
- > RNA is isolated without the use of harmful chemicals such as phenol or chloroform.
- > A260/A280 Ratio: >1.8
- > Elution volume: 50 µl.



RNA was isolated from aliquots of 600µl of preserved saliva samples with Saliva RNA Sample Collection & Stabilization Kit. These samples were preserved at room temperature for 30 days. Isolation was carried out on day 1, day 7, day 15, and day 30 using HigherPurity™ Saliva Total RNA Extraction Kit. Quality was assessed using the Agilent 4150 TapeStation.



Parallel purification of DNA and RNA can be extracted into separated fractions using a modification of the HigherPurity™ Saliva Total RNA Extraction Kit protocol. Quality was assessed using the Agilent 4150 TapeStation.

About Canvax

Since 2001, Canvax has been an original Manufacturer & Supplier of the Most Innovative Enzymes, Kits, Buffers and Reagents. As a leading producer, we are proud of our first-class manufacturing facilities, located in Valladolid (Spain) with a total area of 4,500 m², **specifically designed for commercial scale production**. Due to our reduced overhead and manufacturing capacities with the highest quality standards, we are leading the Life Science industry in terms of product performance, price-to-value ratio, and customer service.

Both products are manufactured in an ISO 14001:2016, **ISO 13485:2016 and GMP-certified facility**, located in Boecillo, Valladolid (Spain), under ISO 9001:2016 procedures to **ensure the highest quality standards**. Including:

- > Batch-to-batch consistency.
- > Facilities audited regularly.
- > Lot specific CoAs and QA review previously to release a product.
- > Material traceability, documented procedures and documented employee training.
- > Equipment maintenance and monitoring records.