

## Isolation of RNA from Rat Liver

*Altana Pharma AG, Germany*



### Context :

In toxicogenomics application field, the molecular biology laboratory of the company Altana Pharma AG is using the Precellys® 24 to isolate RNA for subsequent gene expression profiling using microarrays and quantitative real time PCR.

### Material :

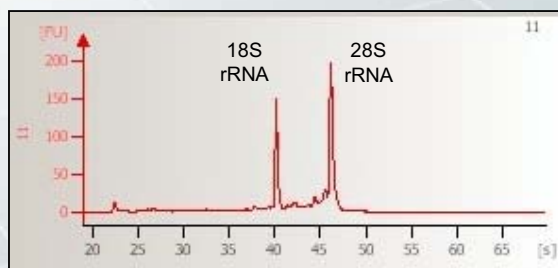
- Precellys®24 & Precellys® Ceramic Kit CK14
- 30 mg of rat liver previously stored in RNA/later® (Ambion) at -20 °C
- 600 µl RLT buffer (RNeasy Mini Kit, Qiagen)

### Protocol / Parameters :

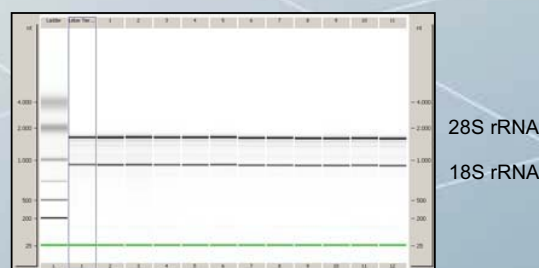
1. add the samples and the buffer in the Precellys tubes
2. load the platform up to 24 tubes
3. set up the parameters : time running (10 sec), speed (5000 rpm), number of cycles (2), rest between cycles (10 sec)

### Results in collaboration with Altana Pharma AG (Germany)

Analysis of the subsequently isolated RNA using the Agilent 2100 bioanalyzer.



Electropherogram of isolated RNA



Gel-like image of RNAs isolated using different Precellys set-ups.

### Conclusion

The Precellys® 24 is an ideal tool for the lysis of rat liver for subsequently isolating RNA. Particularly for higher sample numbers the Precellys is superior to the formerly used mechanical blender, regarding time consumption and reproducibility.