

RNA extraction of microorganisms

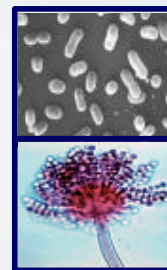
Applications

Within the context of research on genetic analysis, molecular biology brings rapid and reliable answers concerning an eventual pathogen germs contamination (identification and detection).

The sample preparation is an important step, which needs to be efficient without degrading the material, particularly ADN, ARN or proteins.

Material

- Precellys®24 equipment
- Standard tubes of 2ml with ceramic beads kit 03961CK28 or glass beads kit 03961VK05
- Sample : E. Coli bacteria / Bacillus Globugii spores in buffer



Protocol / Parameters

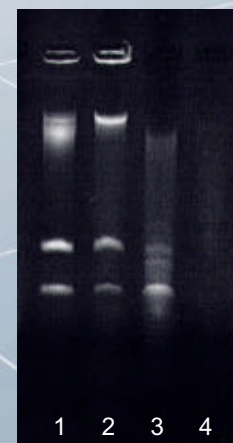
1. add the samples in the tubes with the beads.
2. load the platform up to 24 tubes and close the cover.
3. set up the parameters :
 - time running : 23 sec
 - speed : 6500 rpm
 - number of cycles : 2
 - break between cycles : 5s
4. press start : run.

Results in collaboration with LGN

(Laboratory of molecular Genetic of the Neurotransmission, CNRS of Paris)

- time saving compared with standard lysing protocol
- no cross contamination and easy to clean
- RNA extraction of bacteria and spores :

- | | |
|-------------------------|-------------------------------------|
| 1 E. Coli - Precellys | } ⇒ No ARN deterioration |
| 2 E. Coli - Standard | |
| 3 Spores BG - Precellys | } ⇒ Efficiency on difficult samples |
| 4 Spores BG - Standard | |



LGN Paris, April 2004
RNA extraction after lysis

03961-002-DP007A - May 2005

For more details to adapt your own protocol, please contact us at precellys@bertin.fr

See also www.precellys.fr



Bertin Technologies
Montigny, Aix, Tarnos