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NEW GENERATION Tissue homogenizer
SAMPLE PREPARATION & CELL LYSIS

precellys 24
lysis & homogenization

RNA Extraction from Breast Cancer Xenografts and Lymph Node Metastases

at The Institute of Cancer Research

CONTEXT

Within the context of The Institute of Cancer Research, *ex vivo* tumor tissues are being analyzed to study the gene expression of breast tumors and their metastases.

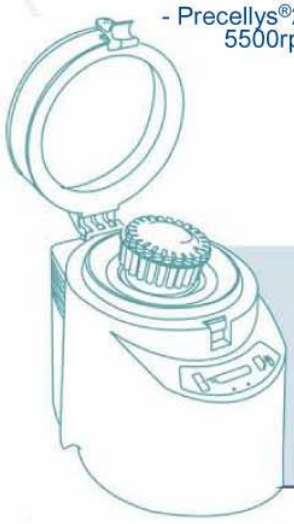
Breast cancer xenografts from different cell lines (MDA-MB-435 and GI-101), as well as their lymph node matastases, were frozen in liquid nitrogen after collection.

MATERIAL

- Precellys®24
- Precellys®24 kit CK14 (small ceramic beads)
- Sample : tumors from breast cancer xenographs and lymph node metastases (frozen)
- Buffer : 600µl of lysis buffer (RTL and ß-mercaptoethanol)

PROTOCOL

- Precellys®24 parameters: 5500rpm, 1x20 sec.



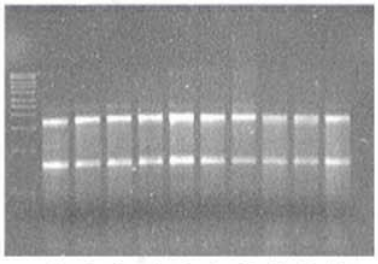
RESULTS

In collaboration with The Institute of Cancer Research, McElain Laboratories, Sutton UK.

RNA extraction are perfomed following 10 differents protocols :

Number	Sample	Time	Number	Sample	Time
1	Primary Tumors	10 Sec.	6	Primary Tumors	20 Sec.
2		3 x 10 Sec.	7	Lymph node metastases	20 Sec.
3		20 Sec.	8		20 Sec.
4		20 Sec.	9		20 Sec.
5		20 Sec.	10		20 Sec.

RNA gel procedure :
0.5 µg of total RNA diluted in 15µl of denaturing loading buffer (containing urea) denatured and run on a 1% agarose gel in 1x TBE at 140v for 1hour.



1 2 3 4 5 6 7 8 9 10

Gel electrophoresis analysis after the 10 protocols. Efficiency is validated on the primary tumors and lymph node metastases.

The Institute of Cancer Research

CONCLUSION

The Precellys® kits allow a quick and effective homogenization of the xenograft tissues, and the total RNA extracted with an appropriate kit following tissue lysis with the Precellys® kits is of good quality.

For more details, please contact precellys@bertin.fr or visit our website

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ISO 9001 BUREAU VERITAS Certification

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