

FAST, EASY, GENTLE!

## pluriBead®

**Application Example** 

Minimize artifacts in RNA expression and protein profiling

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# Minimize artifacts in RNA expression and protein profiling

#### Introduction

Current cell separation methods can take up to two hours and need multiple centrifugation steps and temperature shifts.

With the pluriBead<sup>®</sup> kits, you can isolate specific cell types directly from whole blood. You can work at room temperature (and even at 37°C) without centrifugation and stabilize the RNA and proteins in less than 10 minutes. This will minimize the artifacts in your analysis.

#### **Tested lysis buffers**

Trizol<sup>®</sup>, Qiagen RLT<sup>®</sup> buffer, Promega lysis buffer, Invitek cell lysis buffer, Ambion lysis buffer, PAXgene<sup>®</sup> and RNAlater<sup>®</sup>.

### What is different to standard cell separation with pluriBead®?

If you want to use your target cells for RNA expression analysis, you don't need to detach them from the pluriBead® particles. Simply add a suitable lysing buffer and follow the protocol for your downstream experiment.

Use a pluriBead® kit to get started.

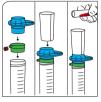
	Magnetic separation	pluriBead®
Application in whole blood	+/-	Yes
Specific cell isolation	Yes	Yes
Pre-treatment of whole blood	Yes	No
Time to receive lysed cells	30 - 120 minutes	<10 minutes
Centrifugation steps	1 - 7	0
Isolation of exosomes	No	Yes
Gentle use at room tem- perature or 37°C	No	Yes

Less than 10 minutes needed for isolated and lysed cells. See video tutorial on our website: www.pluriselect.com

### Protocol for pluriBead<sup>®</sup> cell isolation with subsequent RNA stabilization







Add pluriBead® to your sample Incubate 4 - 6 minutes

Add sample onto separation device

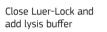




Transfer lysed cells

1.0

Wash and discard funnel, wash pluriStrainer®



#### Figures

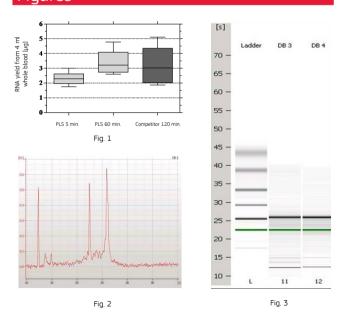


Fig. 1: Comparison of pluriSelect® (PLS) with column technology

Fig. 2: Agilent<sup>®</sup> RNA integrity analysis

Fig. 3: Agilent  $^{\otimes}$  RNA integrity analysis