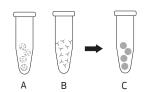
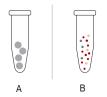
Cell separation with pluriBead® universal



pluriBead® universal and vour antibodies

A - Universal pluriBeads® without specific antibody coating. B - Your own target-specific antibody.

C - Custom-made pluriBead® catcher particles.



pluriBead® and your sample material

A - Custom beads.

B - Sample (e.g. whole blood) containing different targets (cells, proteins, viruses, etc.).



Mixing and incubation

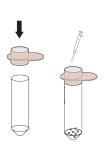
10-30 minutes incubation period of sample and pluri-Beads® at room temperature.



Isolation

Targets – now attached to the beads – are separated using pluriSelects® proprietary sieving technology.

An additional washing step removes all unspecific contamination.



Bead detachment

Each cell type can be detached from the beads using detachment buffer.

Targets are washed off into sterile centrifuge tubes and are ready for your further experiments.

Proceed with a cell culture assay or lyse the cells for RNA/DNA/protein extraction!

FAST, EASY, GENTLE!

pluriBead® universal Customized catcher particles

Fast, easy, gentle!

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Fast cell isolation using pluriBead®

You have a specific antibody but no technology to apply it to? You like to get your targets fast and want a fuss-free isolation system?

pluriBead® universal allows for the easy designing of customized catcher particles to bind and isolate the required targets.

After labeling your own antibody to pluriBead® universal, just proceed with the usual pluriBead® cell isolation protocol.

Meet your experimental needs with pluriBead®

- Custom Bead: Use your own antibody to bind to pluri-Bead® particles. Afterwards, just isolate your specific targets following the usual pluriBead® protocol.
- Sample material: Isolate your cells or proteins from a wide spectrum of biological fluids such as cell culture, bone marrow, whole blood or cell suspensions from homogenates (spleen, liver, lymph nodes, etc.).
- No centrifugation required: Just add the pluriBeads® to your sample and incubate for 10−30 minutes at room temperature.
- High purity: From single cell suspensions such as whole blood you will yield up to 99% target purity.
- Save time: The isolation is fast! Isolate cells for qPCR in less than 10 minutes or for cell culture experiments in less than 60 minutes.
- ▶ High viability: Reduced processing time and fewer handling steps ensure more than 94% viable cells.
- **Variable volume:** You can work with small and precious samples from 0.3 ml up to larger volumes of 45 ml.
- No cooling required: You can work at room temperature during the entire protocol.

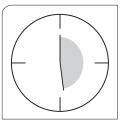
For more detailed information, please see www.pluriselect.com

The labeling procedure



A

Add universal pluriBeads® and your antibody to a tube.



B

Incubate for 3–4 hours with gentle agitation. Your antibody will now bind to the universal catcher particles.



C

Wash the labeled pluriBeads®.



D

Add PBS solution for immediate use or long-term storage.

Separate your targets with the custom-labeled universal beads by following the usual pluriBead® protocol.

Universal pluriBeads® are now ready for your experiments:

- Isolation from whole blood, buffy coat, tissue
- Isolation of cells or proteins
- Further applications such as:
 Cell culture experiments, RNA/DNA isolation, Flow cytometry analysis, Cell stimulation experiments etc.

Examples for isolation protocols

Isolate single cells from cell suspensions

Use pluriBead® universal to isolate cells from buffy coat, whole blood or tissue cultures. In a single step, cells can be detached from the beads in just 10 minutes – the viability remains above 90%. Fast, easy and gentle!

Isolate single cells directly from unprocessed whole blood

Mix fresh EDTA-whole blood with pluriBead® universal and incubate up to 30 minutes. Pour the bead-sample mix onto the strainer and wash with buffer. That's it! For incubation, rinse the bead-bound cells into a cell culture dish.

Nucleic acid isolation within minutes

Incubate your sample with pluriBead® universal. A 10-minute incubation period will yield sufficient cells for a PCR experiment. Lyse the cells directly on the strainer and transfer the lysate to a suitable vial. Proceed with your nucleic acid isolation procedure as usual.

Protein isolation within minutes

Incubate your sample with pluriBead® universal, isolate the target cells and remove unbound cells by washing. Lyse the cells directly on the strainer and transfer the lysate to a suitable vial. Continue with your protein extraction method as usual.

Multi-target isolation via cascade sieving or step-by-step separation

Use our cascade sieving kit to isolate two distinct cell types from one sample in one step. Mix two types of pluriBeads®, e.g. CD4 & CD8, with your sample. Pour the sample onto the strainer cascade and rinse with wash buffer. Disassemble the strainer cascade and rinse the bead-bound cells from each strainer into a cell culture dish. You may also isolate nucleic acids or proteins.

For step-by-step separation, use the flow-through of the first separation as sample material for the second isolation. This way you will not lose any sample material.