



## **CELL SELECTION - REINVENTED**

FABian® - a fully automated cell selection device



## **Key Features:**

- **)** fast
- > from whole blood
- **>** high yields
- **>** high purity
- **>** high viability
- > magnetic bead free
- **>** fully automatic
- **>** embedded system
- > label-free authentic target cells
- > no centrifugation

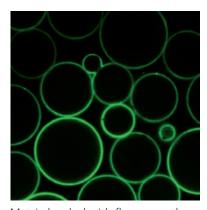
### FAB-BASED IMMUNE AFFINITY CHROMATOGRAPHY

FABian® is equipped with a pre-made column filled with a Strep-Tactin® coated cell-grade agarose matrix and max. 11 tubes containing the required selection reagents.

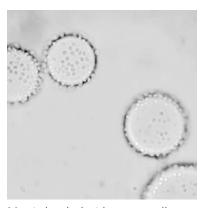
FABian® starts the automated cell selection process by adding a specific Strep-tagged Fab fragment to the matrix. Subsequently, FABian® passes whole blood or other single-cell suspensions through the Fab-TACS® auto column. Target cells bind to the matrix based on the binding specificity of the loaded Fab fragment and in a next step non-target cells are washed away.

In the final step, FABian® adds biotin to the Fab-TACS® auto column, which causes elution of the Strep-tagged Fab from the matrix as well as dissociation of the Fab fragments from the cell surface. The label-free authentic target cells are now selected in high yields and purity.

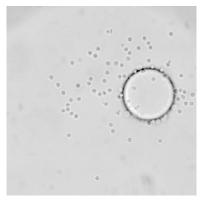
Remarkably, FABian® enables the selection of even small cell populations with high purity directly from whole blood.



Matrix loaded with fluorescently labeled Strep-tagged Fab fragments



Matrix loaded with target cells



After adding biotin: target cells are released from the matrix

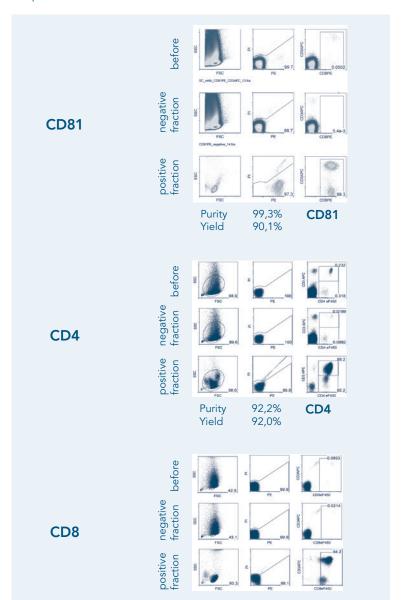


# CELL SELECTION FROM WHOLE BLOOD MAGNETIC BEAD FREE

The FABian® cell selection process employs IBA's unique traceless affinity cell selection (Fab-TACS®) technology for the automatic selection of specialized cell populations including T & B cells and other cell types.

The novel cell selection technology utilizes non-magnetic and fully reversible Strep-tagged Fab fragments targeting specific cell surface markers.

FABian® quantitatively selects the cells of interest in high yields with high efficiency and purity from a suspension such as whole blood, buffy coat and other single-cell tissue suspensions. Due to the mild procedure to gain label-free target cells, serial positive cell selections are possible.



94,2%

75,0%

Purity Yield CD8



# FABian® device



## **FABIAN® DEVICE**

Product description	Cat. no.
FABian <sup>®</sup>	6-6100-260
automated cell selection system with 10 ml syringe	0-0100-200

## **ISOLATION KITS FOR FABIAN®**

Species	Product description	Size	Cat. no.
human	CD3 Isolation Kit	1 kit	6-6001-001
		10 kits	6-6001-010
	CD4 Isolation Kit	1 kit	6-6002-001
		10 kits	6-6002-010
	CD8 Isolation Kit	1 kit	6-6003-001
		10 kits	6-6003-010
	CD45RA Isolation Kit	1 kit	6-6007-001
		10 kits	6-6007-010
	CD28 Isolation Kit	1 kit	6-6014-001
		10 kits	6-6014-010
	PBMC Isolation Kit	1 kit	6-6015-001
		10 kits	6-6015-010
	CD14 Isolation Kit	1 kit	6-6017-001
		10 kits	6-6017-010
mouse	CD4 Isolation Kit	1 kit	6-6501-001
		10 kits	6-6501-010
	CD3 Isolation Kit	1 kit	coming
		10 kits	soon

## Content of the FABian® cell selection kits:

- 1 vial of receptor-specific Fab-Strep
- > 1 vial of biotin for cell elution
- 1 bottle of cell isolation buffer
- ▶ 1 Fab-TACS® auto column
- **)** 1 tube and syringe set

Depending on the kit, up to 9 ml of whole blood or up to 6.25 ml buffy coat can be processed.