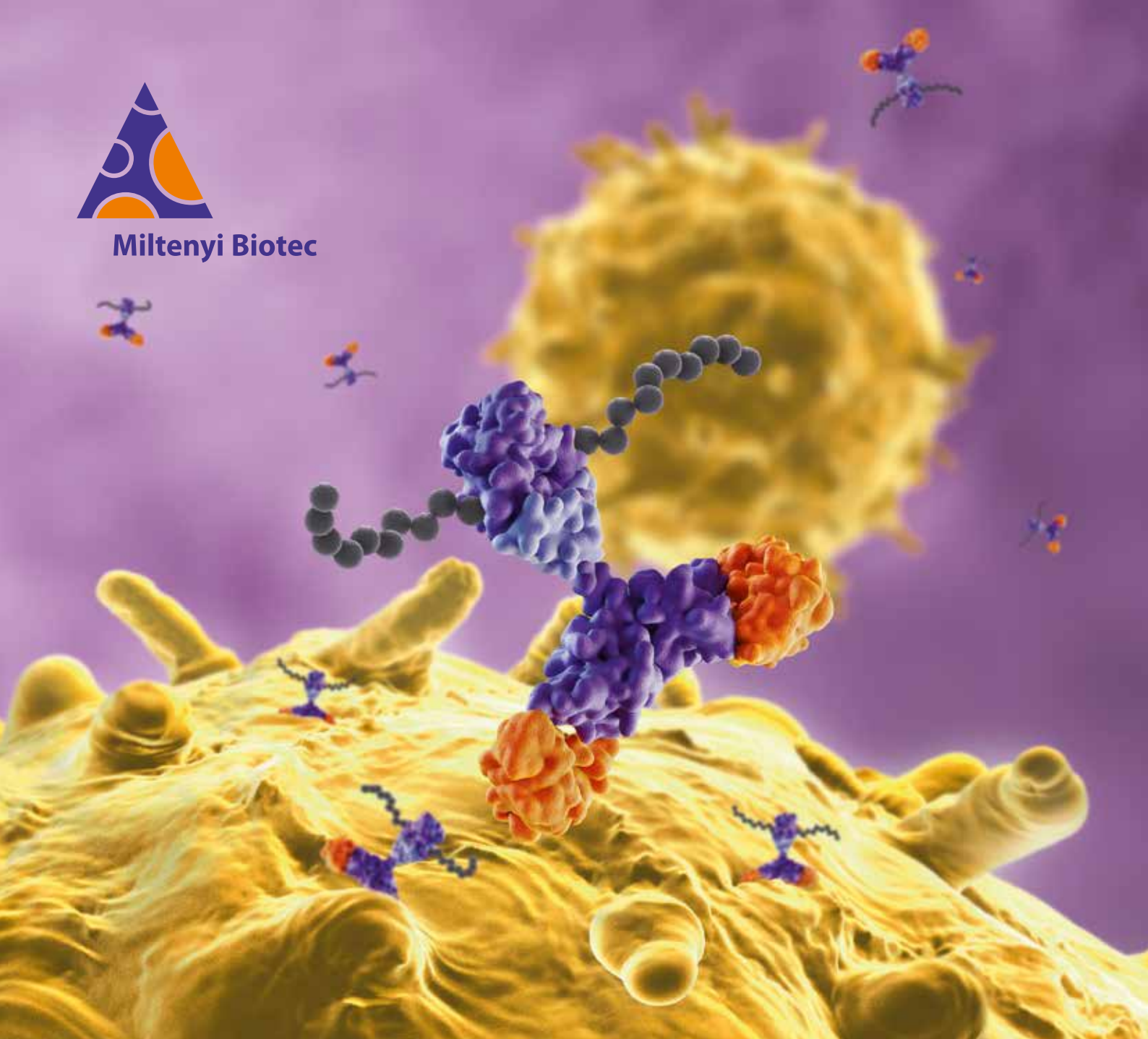




Miltenyi Biotec



## REafinity™ Antibodies for mass cytometry

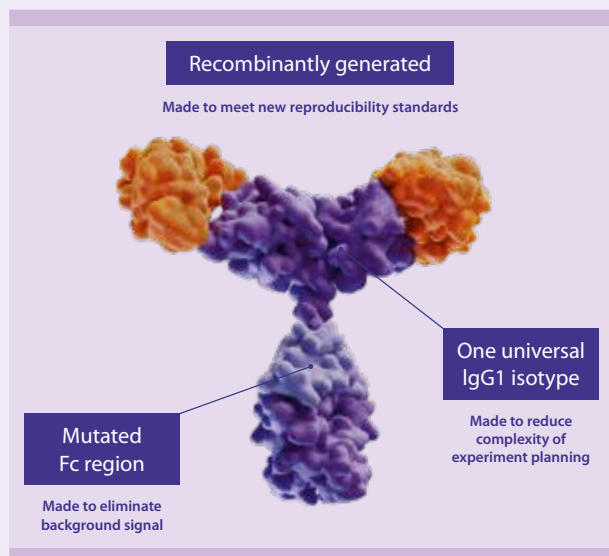
Recombinantly engineered to increase reproducibility

- Extensive portfolio of recombinantly engineered antibodies for high reproducibility and consistent conjugation performance
- Provided in a stabilizer-free aqueous buffer suitable for conjugation
- Conjugation-optimized concentration of 1 µg/µL

► [miltenyibiotec.com/masscytometry](https://miltenyibiotec.com/masscytometry)

## Mass cytometry has just become recombinant

To improve your data quality when it comes to mass cytometry, Miltenyi Biotec has developed recombinantly engineered antibodies specifically for CyTOF® applications. Our REAfinity™ Recombinant Antibody portfolio for mass cytometry includes pure antibodies optimized for conjugation to isotopes of your choice.



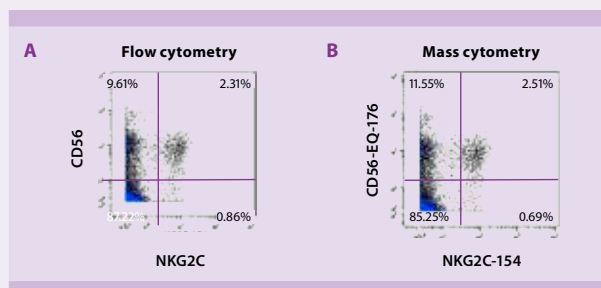
**Figure 1: Advantages of REAfinity Recombinant Antibodies.**

### Why choose REAfinity Antibodies for mass cytometry?

- **Recombinantly generated**  
Reproducible results through consistent antibody quality
- **Produced in standardized mammalian cell culture systems**  
No unwanted Ig impurities
- **Universal human IgG1 isotype**  
No isotype-dependent variation during metal conjugation
- **Mutated Fc region**  
No more FcγR-mediated background signal

### Consistent reagents, consistent results

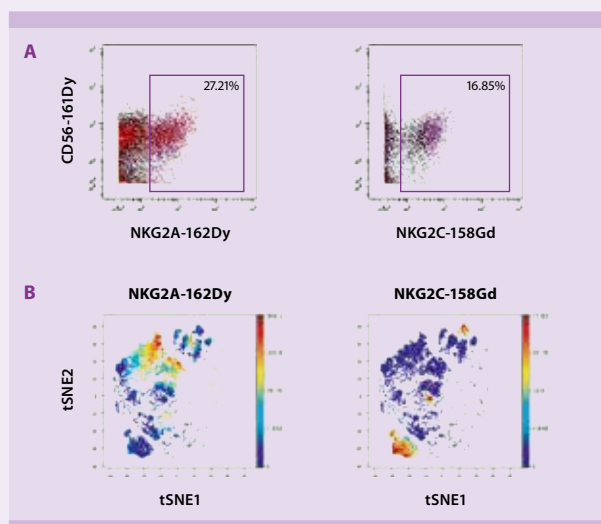
Flow cytometry and mass cytometry are methods each with unique advantages and limitations. To maximize the amount of information gathered, they are often used in a complementary fashion. The usage of the same recombinant antibody clone for both assays contributes to standardization efforts, providing highly comparable results (fig. 2).



**Figure 2: Comparison between flow and mass cytometry.**

(A) Human peripheral blood mononuclear cells were stained with CD159c (NKG2C)-PE (REA205) and analyzed using flow cytometry (B) The same sample was stained with the metal-conjugated pure version of CD159c (NKG2C) (REA205) and analyzed using mass cytometry. Data courtesy of Prof. Karl Johan Malmberg, Oslo University Hospital, Norway.

An example of performance data using REAfinity Antibodies for the characterization of natural killer (NK) cells (fig. 3) shows good separation of the NK markers NKG2A and NKG2C (fig. 3A) and an accurate discrimination of their mutually exclusive expression pattern via viSNE analysis (fig. 3B).



**Figure 3: Expression pattern of NKG2A and NKG2C on NK cells.**

(A) Representative mass cytometry plots show NK cell marker expression including NKG2A and NKG2C counterstained with CD56. (B) Additionally, viSNE analysis was performed by clustering 20,000 NK cells according to the expression of 13 different markers. The following REAfinity Recombinant Antibodies were used for staining: CD56 (REA196), CD122 (IL-2Rβ) (REA167), CD38 (REA671), CD39 (REA739), CD366 (TIM-3) (REA635), TIGIT (REA1004), CD226 (DNAM-1) (REA1040), CD159a (NKG2A) (REA110), CD159c (NKG2C) (REA205), CD158a (KIR2DL1) (REA284), CD158a/h (KIR2DL1/DS1) (REA1010), CD158b (KIR2DL2/DL3) (REA1006), and CD158e (KIR3DL1) (REA1005). Data courtesy of Dr. Amir Horowitz, Icahn School of Medicine at Mount Sinai, United States.

### Custom antibodies and bulk requests

Can't find your desired antibody or size? Request your custom antibody now! Every clone in our portfolio can be requested as a pure version for mass cytometry applications. For further information please visit [www.miltenyibiotec.com/customab](http://www.miltenyibiotec.com/customab)