FLUORESCENT DEXTRANS

	REF	Σ	
PE	DXPE-25T	25 test	RUO
PE	DXPE-100T	100 test	

1. PRODUCT DESCRIPTION

- Description: Fluorescent dextrans are designed for signal amplification in flow cytometry applications using biotin-streptavidin binding for flexible target detection.
- Tested application: flow cytometry
- Functional group: Biotin binding (vi_streptavidin)
- Storage instruction: store in the dark at 2-8℃
- Storage buffer: aqueous buffered solution (PBS 20 mM, 150 mM Sodium Chloride, pH 7.4) containing 1% BSA and 0.09% Sodium Azide.
- Intend of use: conjugation with monobiotiny lated proteins to improve fluorescent signal in flow cytometry.
- Presentation: liquid
- Dextran concentration: 0.1 µM

2. PRODUCT DETAILS

The product consists of dextran polymers conjugated with R-phycoerythrin (R-2PE) and streptavidin, allowing efficient binding to biotinylated molecules. This conjugation improves signal amplification and sensitivity in flow cytometry assays, especially for rare populations or low expressing manufacturers.

3. WARRANTY

Warranted only to conform to the quantity and contents stated on the label or in the product labelling at the time of delivery to the customer. Immunostep disclaims hereby other warranties.

Immunostep's sole liability is limited to either the replacement of the products or refund of the purchase price.

4. ADDITIONAL INFORMATION

For research use only. Not for diagnostic use.

Not for resale. Immunostep will not be responsible of violations that may occur with the use of this product. Any use of this product other than the specified in this document is strictly prohibited

Unless otherwise indicated by Immunostep by written authorization, this product is intended for research only and is not to be used for any other purpose, including without limitation, for human or animal diagnostic, therapeutic or commercial purposes. Please, refer to www.immunostep.com technical support for more information.

5. CONJUGATION WITH BIOTINYLATED PROTEINS

There is no generic titer for all proteins, each one must be titrated to ensure the best results. It is recommended to use monobiotinylated proteins because random biotin conjugation may interfere with target recognition.

To calculate the optimal amount of protein by dextran, the following formula can be used:

$$V_P = \frac{V_{DX} \cdot [DX] \cdot RM}{[P]}$$

V_P : biotinylated protein volume in µL
V_{DX} : fluorescent dextran volume in µL
[DX]: fluorescent dextran concentration in µM
[P]: biotinylated protein concentration in µM
MR: molar ratio Protein/Dextran

A first trial of three molar ratios can show where approximately the optimal amount is. It is recommended to try 10, 20 and 30; then, test less difference between ratios. To calculate the volume per test, the following formula can be used:

$$V_T = \frac{V_{DX} + V_P}{\frac{V_{DX}}{2}}$$

V_P : biotinylated protein volume in µL
V_{DX} : fluorescent dextran volume in µL
V_T : volume per test in µL/Test

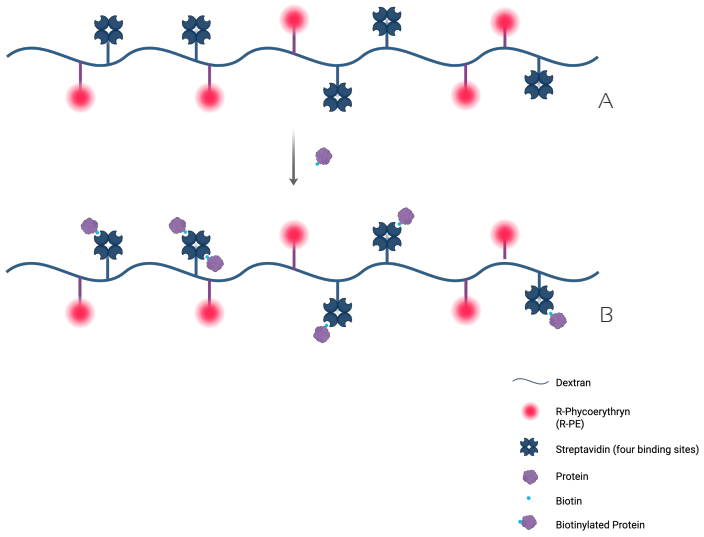

Figure 1. (A) Fluorescent dextran; (B) Fluorescent dextran with biotinylated protein attached.

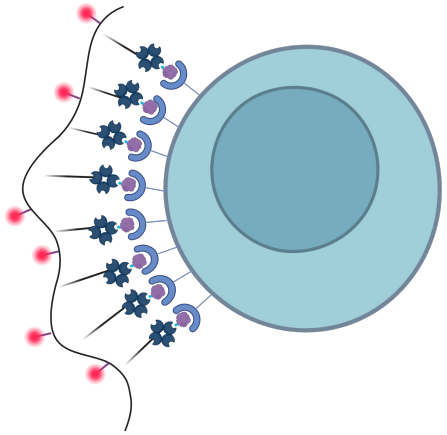

Figure 2. Presentation of protein to its specific receptor using the fluorecent dextran system

6. EXPLANATION OF SYMBOLS

	Form
REF	Catalog reference
Σ	Contains sufficient for > test
	Quantity per test
	Regulatory Status
RUO	Research Use Only
[A]	Concentration
	Manufacturer

7. MANUFACTURED BY:

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