Exosome Detachment Solution



I. INTRODUCTION



Exosomes are small extracellular vesicles that are released from cells upon fusion of an intermediate endocytic compartment, the multivesicular body (MVB)¹, with the plasma membrane. They are thought to provide a means of intercellular communication and of transmission of macromolecules between cells allowing the spread of proteins, lipids, mRNA, miRNA and DNA and as contributing factors in the development of several diseases.

The biological characterization of exosomes requires in most cases the isolation of intact exosomes. In this sense, many methods have been developed for the isolation of exosomes from biological fluids, among which are ultracentrifugation, chromatography, filtration, polymer-bases precipitation and immunological separation². As a rule, the use of immunological methods requires the use of a solid substrate, usually magnetic beads, coated with antibodies or ligands directed against specific antigens on the exosome surface, allowing their specific isolation. In this way, in some cases for downstream exosome analysis it is necessary to elute the exosomes from the antibody-bead complex, avoiding potential interference.

2. PRODUCT DESCRIPTION

Antibody bead complex exosome detachment solutionThe exosome detachment solution of the antibody-pearl complex is based on chaotropic agent and low pH (3) which allows a recovery of approximately 50% (recovery depends on the type of exosome) without destabilising the exosomes using a simple protocol.

INTENDED USE

Revision N° 3 I Emission date: 22/12/2022

This solution has been designed to elute the exosomes from the antibody-bead complex and allow downstream analysis of the immunopurified exosomes without any type of interference. This product is compatible with #ExoStep kits family and #Capture beads product range. Please visit our website for more information: https://exosomes.immunostep.com/

4. APPROPIATE STORAGE AND HANDLING CONDITIONS

Store in the dark, refrigerated between 2° C and 8° C. DO NOT FREEZE. The reagent is stable until the expiry date stated on the vial label if kept at $2-8^{\circ}$ C. Do not use after indicated date.

PROTOCOL

After Immunopurification, are captured by antibody-bead complex, for exosome detachment follow the instructions below:

- Collet the magnetic beads by placing tubes on a magnetic rack and incubate 5 minutes or by centrifugation at 2500xg for 5 minutes and discard supernatant.
- 50ul of detached solution and incubate for 2h at 37°C.
- c. After incubation, remove the magnetic beads by placing tubes on a magnetic rack and incubate 5 minutes or by centrifugation at 2500xg for 5 minutes and collect the supernatant containing, the free exosomes, once detached from the antibody-bead, ready for downstream analysis.

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.

ADDITIONALINFORMATION

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.

8. REFERENCES

- Yáñez-Mó M, Siljander P, Andreu Z, Bedina Zavec A, Borràs F, Buzas E et al. Biological properties of extracellular vesicles and their physiological functions. Journal of Extracellular Vesicles. 2015;4(1):27066.
- Osteikoetxea X, Sódar B, Németh A, Szabó-Taylor K, Pálóczi K, Vukman KV, Tamási V, Balogh A, Kittel Á, Pállinger É, Buzás El. Differential detergent sensitivity of extracellular vesicle subpopulations. Org Biomol Chem. 2015 Oct 14;13(38):9775-82.

9. EXPLANATION OF SYMBOLS

REF	Product reference
\sum	Content for <n> analysis</n>
	Regulatory Status
RUO	Research Use Only
***	Manufacturer



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