ActiveMax® Anti-G4S linker µBeads, premium grade (for cells)

Cat. No. MBS-C022

Product Information

Product	Size	Amount
ActiveMax® Anti-G4S linker µBeads, premium grade (for cells)	2.5 mg	2.5×10^7 beads
	10 mg (2.5 mg × 4)	1.0×10^8 beads

Product Description

ActiveMax® Anti-G4S linker µBeads, premium grade (for cells) are uniform, superparamagnetic beads of 5.5 µm coated with monoclonal Anti-G4S linker Antibody which is a rabbit monoclonal antibody recombinantly expressed from human 293 cells (HEK293). The antibody can specifically recognize the linker of a core pentapeptide sequence, Gly-Gly-Gly-Gly-Ser.

ActiveMax® Anti-G4S linker µBeads, premium grade (for cells) are produced under sterile manufacturing conditions (ISO 5), and no animal- or human-derived components are used throughout the production process. It is produced under our rigorous quality control system that includes a comprehensive set of tests including sterility and endotoxin tests.

Product Applications

ActiveMax® Anti-G4S linker µBeads, premium grade (for cells) is designed to positively select cells engineered to express the CARs containing a G4S linker within the scFv. It is used to enrich cells with CAR-containing a G4S linker on the surface.

The Product performance has been carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. For use in clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials used in cell manufacturing of cell-based therapies.

Formulation

Lyophilized in PBS with 0.1% HSA, pH 7.4. Trehalose is added as a protectant before lyophilization.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the Certificate of Analysis.

Storage

This product is stable in storage under the following conditions:

- -20˚C for 12 months in lyophilized state.
- -70°C for 3 months under sterile conditions after reconstitution.

Please avoid repeated freeze-thaw cycles after reconstitution. Immediate use after reconstitution is highly recommended.

Important Note

This product is for research use only and not intended for therapeutic or in vivo diagnostic use.

General guidelines

It is recommended to reconstitute the lyophilized ActiveMax® Anti-G4S linker µBeads, premium grade (for cells) with sterile deionized water to a stock solution of 5 mg/mL (5×10^7 beads/mL) under ISO 5 clean conditions. Separate into working aliquots and store at -70°C immediately. Upon reconstitution, immediate use is recommended for best performance.

Use a magnetic separator that is suitable for your equipment and application. Allow the beads to separate for at least 1 minute before removing supernatant. The µBeads are dense and will settle very quickly. Be sure that any µBeads mixture is homogenous before use or aliquoting.

Preparing µBeads for use

Washing the ActiveMax® Anti-G4S linker µBeads, premium grade (for cells) to remove trehalose from the formulation buffer before use.

1. Resuspend the Magnetic Beads in the vial (i.e. vortex for >30 sec, or tilt and rotate for 5 min).
2. Transfer the desired volume of Magnetic Beads to a sterile tube.
3. Add an equal volume of sterile PBS buffer, or at least 1 mL, and mix (vortex for 5 sec, or keep on a roller for at least 2 min).
4. Place the tube on a magnet for 1 min and let the beads settle before discarding the supernatant.
5. Remove the tube from the magnet and resuspend the washed ActiveMax® Anti-G4S linker µBeads in the same volume of cell culture medium as the initial volume of ActiveMax® Anti-G4S linker µBeads taken from the vial (Step 2).

Enriching Cells

1. Prepare non-sorting cells with suitable cell numbers in tubes.
2. Add the prepared ActiveMax® Anti-G4S linker µBeads with optimizing quantity and ratio with the cells.
3. Mix well to 3D Rotating Mixed and incubate for 15 minutes at 4−8 °C.
4. Place tube on magnetic stand for 2-3 min, the supernatant was removed after the solution was clarified.
5. Resuspend the isolated cells with the culture medium and then seed them in culture dish.
6. Culture the isolated cells in the CO_2 incubator (at 37 ℃, 5% CO2) for 72 hrs.
7. Collect the cultured cells for detection of the cell purity by Flow cytometer.

For use in vitro*, ActiveMax® Anti-G4S linker µBeads, premium grade (for cells) need to be optimized by the user according to their own experiments.*

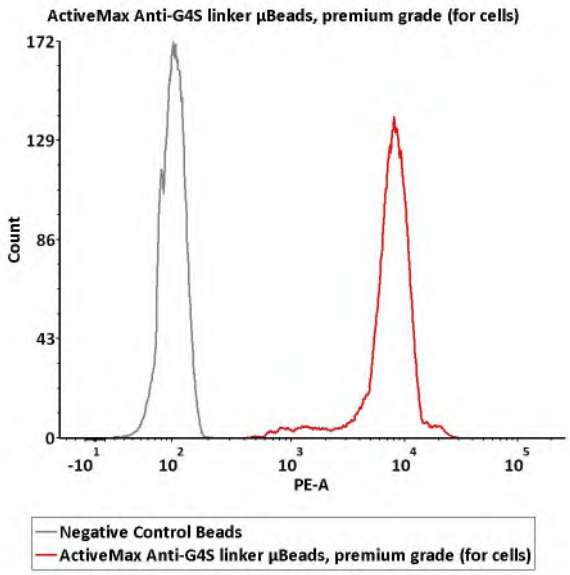
Removing µBeads from cells

1. Transfer the culture containing cells and ActiveMax® Anti-G4S linker µBeads to tube(s) and place on a magnetic for 5 min.
2. Transfer the supernatant to a new tube(s) and repeat step 1.
3. Transfer the supernatant containing the cells to a new tube for use.

Contact Information

If you have any questions, please contact our technical support team at: **TechSupport@acrobiosystems.com**

- **Conjugated anti-G4S linker analyzed by FACS**



Assay of antibody on ActiveMax® anti-G4S linker µBeads surface by Flow cytometry.

The anti-G4S linker antibody conjugated on the µBeads surface were fluorescently stained using PE goat anti-rabbit IgG Antibody respectively, and then analyzed by flow cytometry (QC tested).

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