APC-Labeled Monoclonal Anti-G4S linker Antibody, Mouse IgG1 (AM635) (Site-specific conjugation)

Catalog # G4S-AFM664

Source

Monoclonal Anti-G4S linker Antibody, Mouse IgG1 (AM635) is a mouse monoclonal antibody recombinantly expressed from human 293 cells (HEK293).

Isotype

Mouse IgG1/kappa

Specificity

This product is a specific antibody specifically reacts with G4S linker.

Conjugate

APC

Excitation Wavelength: 640 nm

Emission Wavelength: 661 nm

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, 0.5% BSA, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

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

Storage

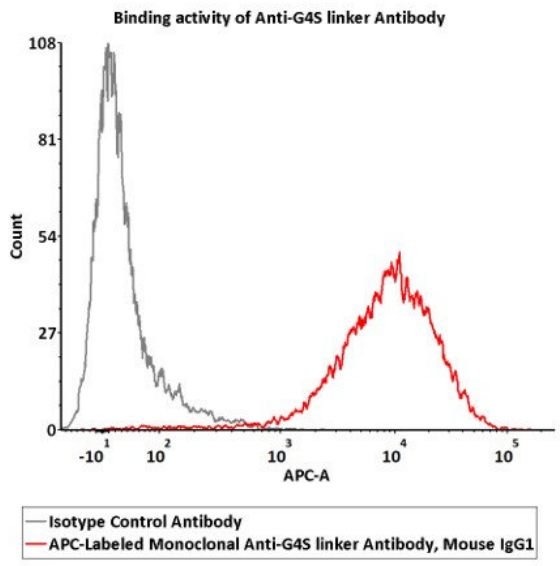
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

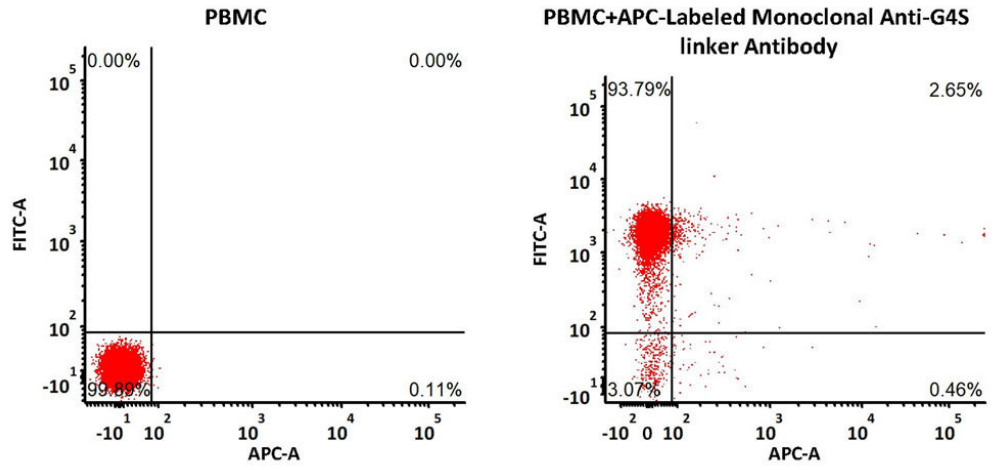
This product is stable after storage at:

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

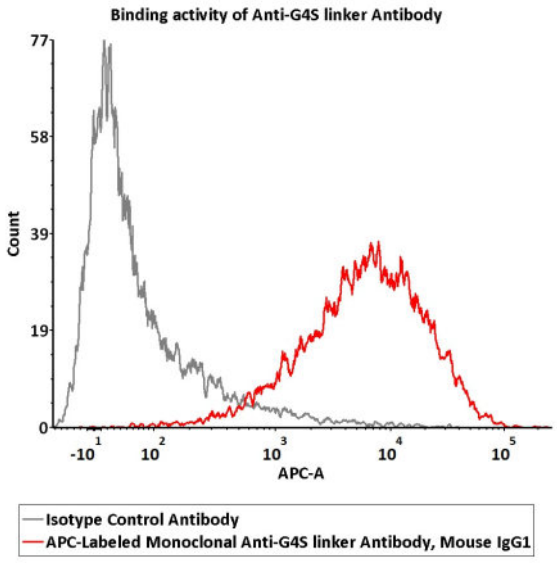
Bioactivity-FACS



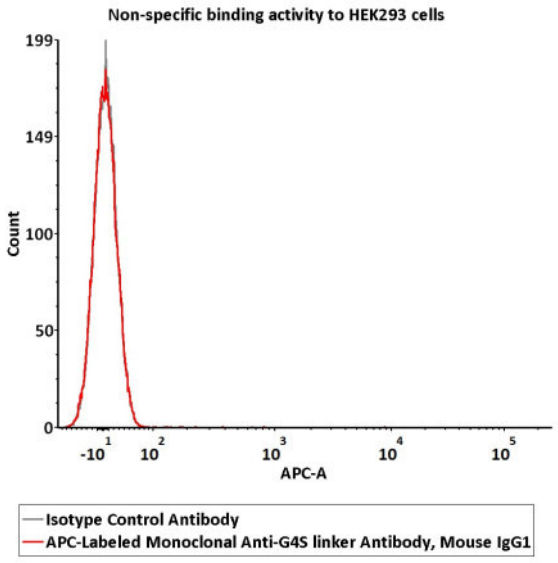
Flow cytometric analysis of Anti-MSLN CAR-293 cells staining with APC-Labeled Monoclonal Anti-G4S linker Antibody, Mouse IgG1(AM635) (Cat. No. G4S-AFM664) at 1:25 dilution(4 μL of the antibody stock solution corresponds to labeling of 1e6 cells in a final volume of 100 μL) , compared with isotype control antibody. APC signal was used to evaluate the binding activity (QC tested).



Non-specificity of APC-Labeled Monoclonal Anti-G4S linker Antibody, Mouse IgG1(AM635) (Cat. No. G4S-AFM664) binding to CD3+ cells present in human PBMC. 5e5 of human PBMCs were simultaneously stained with FITC-labeled anti-CD3 antibody and APC-Labeled Monoclonal Anti-G4S linker Antibody (4 μL of the antibody stock solution corresponds to labeling of 5e5 cells in a final volume of 100 μL) and washed and then analyzed with FACS. Both FITC and APC positive signals was used to evaluate the non-specific binding activity to human CD3+ cells (QC tested).



Flow cytometric analysis of Anti-CD19 CAR-293 cells staining with APC-Labeled Monoclonal Anti-G4S linker Antibody, Mouse IgG1(AM635) (Cat. No. G4S-AFM664) at 1:25 dilution(4 μL of the antibody stock solution corresponds to labeling of 1e6 cells in a final volume of 100 μL) , compared with isotype control antibody. APC signal was used to evaluate the binding activity(Routinely tested).



Flow cytometric analysis of HEK293 cells staining with APC-Labeled Monoclonal Anti-G4S linker Antibody, Mouse IgG1(AM635) (Cat. No. G4S-AFM664) at 1:25 dilution(4 μL of the antibody stock solution corresponds to labeling of 1e6 cells in a final volume of 100 μL) , compared with isotype control antibody. APC signal was used to evaluate the binding activity(Routinely tested).

Background

The poly-Glycine-Serine (G4S) linker is a type of flexible, unstructured synthetic peptide linker sequence often leveraged to connect the variable heavy (VH) domain and variable light (VL) domain of single-chain variable fragments (scFvs) and chimeric antigen receptors (CARs) that utilize an extracellular domain scFv for target antigen recognition. The linker itself consists of a core pentapeptide sequence, Gly-Gly-Gly-Gly-Ser, that is repeated and commonly found as either a 15-mer (G4S)3 or20-mer(G4S) 4 within scFv-based CARs and scFv fragments. The linker sequence length plays a role in controlling scFv stability and the noncovalent association between the VH and VL domains.

Clinical and Translational Updates