PE-Labeled Monoclonal Anti-G4S linker Antibody, Rabbit IgG (016) (0.03% Proclin)

Catalog # G4S-PFMY25

Source

Monoclonal Anti-G4S linker Antibody, Rabbit IgG (016) is a rabbit monoclonal antibody recombinantly expressed from human 293 cells (HEK293)， which provides higher batch consistency and long term security of supply.

Application

Flow Cytometry (Evaluation of cell surface expressed CARs of varying specificity containing a G4S linker within the scFv of the extracellular domain).

Clone

016

Species

Rabbit

Isotype

Rabbit IgG | Rabbit Kappa

Specificity

Specifically recognizes the scFv-based CARs containing a G4S linker.

Conjugate

PE

Excitation Wavelength: 488 nm / 561 nm

Emission Wavelength: 575 nm

Recommended Dilution

1:50

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, 0.03% Proclin 300, pH7.4, 0.2% BSA 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.

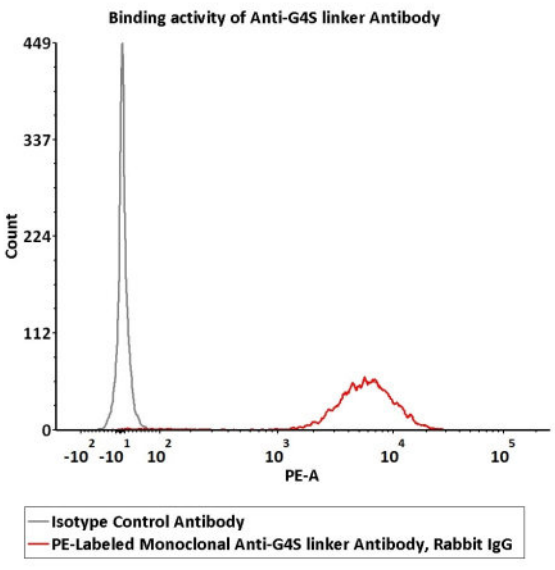
Storage

Please protect from light and avoid repeated freeze-thaw cycles.

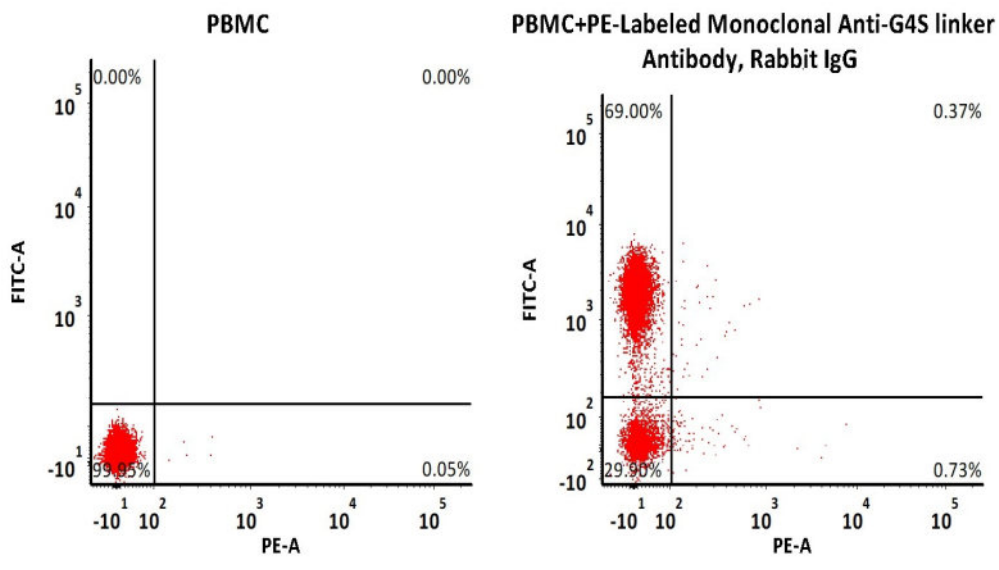
This product is stable after storage at:

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

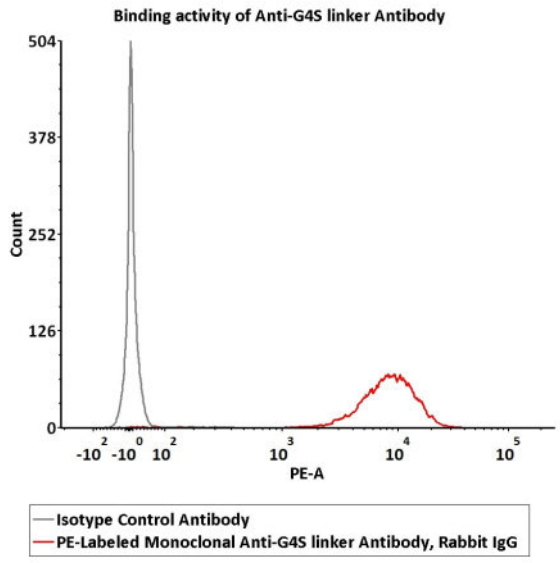
Bioactivity-FACS



Flow cytometric analysis of Anti-MSLN CAR-293 cells staining with PE-Labeled Monoclonal Anti-G4S linker Antibody, Rabbit IgG (016) (Cat. No. G4S-PFMY25) at 1:50 dilution (2 μL of the antibody stock solution corresponds to labeling of 1e6 cells in a final volume of 100 μL), compared with isotype control antibody. PE signal was used to evaluate the binding activity (QC tested).

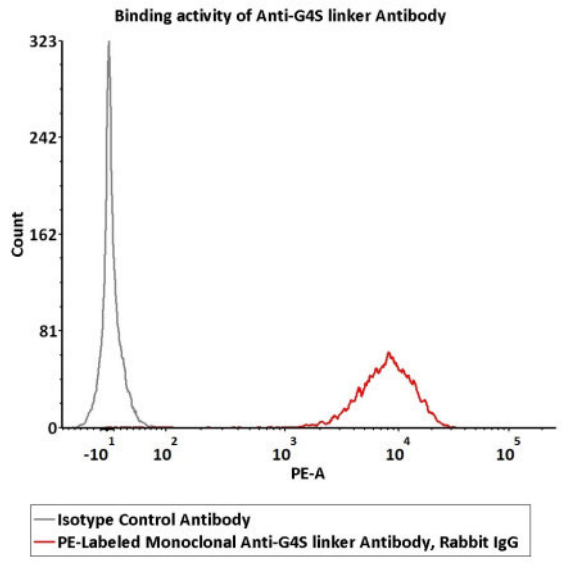


Non-specificity of PE-Labeled Monoclonal Anti-G4S linker Antibody, Rabbit IgG (016) (Cat. No. G4S-PFMY25) binding to CD3+ cells present in human PBMC. 5e5 of human PBMCs were simultaneously stained with FITC-labeled anti-CD3 antibody and PE-Labeled Monoclonal Anti-G4S linker Antibody (2 μL of the antibody 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



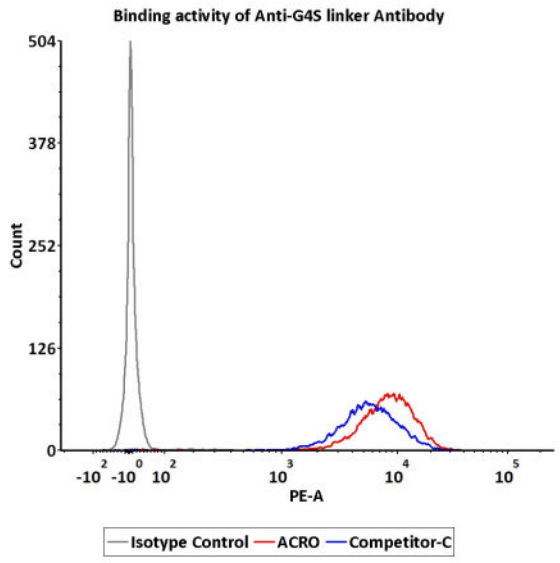
Flow cytometric analysis of Anti-CD19 CAR-293 cells staining with PE-Labeled Monoclonal Anti-G4S linker Antibody, Rabbit IgG (016) (Cat. No. G4S-PFMY25) at 1:50 dilution (2 μL of the antibody stock solution corresponds to labeling of 1e6 cells in a final volume of 100 μL), compared with isotype control antibody. PE signal was used to evaluate the binding activity (Routinely tested).

PE positive signals was used to evaluate the non-specific binding activity to human CD3+ cells (QC tested).



Flow cytometric analysis of Anti-CD22 CAR-293 cells staining with PE-Labeled Monoclonal Anti-G4S linker Antibody, Rabbit IgG (016) (Cat. No. G4S-PFMY25) at 1:50 dilution (2 μL of the antibody stock solution corresponds to labeling of 1e6 cells in a final volume of 100 μL), compared with isotype control antibody. PE signal was used to evaluate the binding activity (Routinely tested).

Compared Data



Flow cytometric analysis of Anti-CD19 CAR-293 cells staining with PE-Labeled Monoclonal Anti-G4S linker Antibodies. PE signal was used to evaluate the binding activity of anti-G4S linker antibody. The biological activity level of Acro is superior to competitor C (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