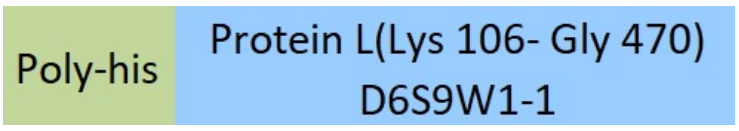
Synonym

RPL,Protein L

Source

PE-Labeled Recombinant Protein L, His Tag (RPL-PP2H2) is produced via site-specific conjugation of PE to Recombinant Protein L, His Tag under optimal conditions with a proprietary technology. Recombinant Protein L, His Tag is expressed from E. coli cells. It contains AA Lys 106 - Gly 470 (Accession # D6S9W1-1).
Predicted N-terminus: His

Molecular Characterization



This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 43.7 kDa.

Conjugate

PE

Excitation Wavelength: 488 nm / 561 nm

Emission Wavelength: 575 nm

Application

Please note that this product is NOT compatible to streptavidin detection system.

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

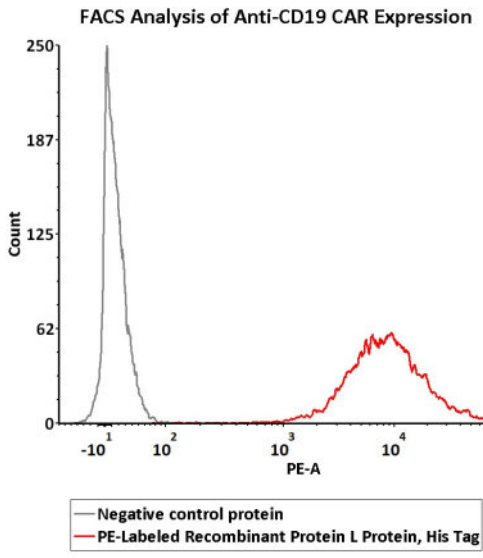
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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

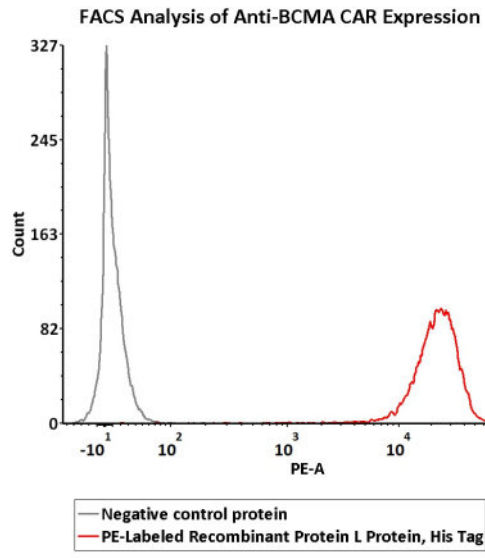
This product is stable after storage at:

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

Bioactivity-FACS



5e5 of the CD19-CAR-293 cells were stained with 100 μL of 1:50 dilution (2 μL stock solution in 100 μL FACS buffer) of PE-Labeled Recombinant Protein L Protein, His Tag (Cat. No. RPL-PP2H2) and negative control protein respectively, PE signal was used to evaluate the binding activity (QC tested).



5e5 of the BCMA-CAR-293 cells were stained with 100 μL of 1:50 dilution (2 μL stock solution in 100 μL FACS buffer) of PE-Labeled Recombinant Protein L Protein, His Tag (Cat. No. RPL-PP2H2) and negative control protein respectively, PE signal was used to evaluate the binding activity (QC tested).

Background

Protein L was isolated from the surface of bacterial species Peptostreptococcus magnus and was found to bind Ig(IgG,IgM,IgA,IgE and IgD) through L chain interaction, from which the name was suggested. Despite this wide-ranging binding capability with respect to Ig classes, Protein L is not a universal immunoglobilin-binding protein. Binding of Protein L to immunoglobulins is restricted to those containing kappa light chains (i.e., k chain of the VL domain). In humans and mice, kappa (k) light chains predominate. The remaining immunoglobulins have lambda (l) light chains. The recombinant protein contains four immunoglobulin (Ig) binding domains (Bdomains) of the native protein. Besides antibody, protein L is also suitable for binding of a wide range of antibody fragments such as Fabs, single-chain variable fragments (scFv), and domain antibodies (Dabs).