APC-Labeled Human CLEC12A / MICL / CLL-1 Protein, His TagStar Staining

Catalog # CLA-HA244

Synonym

CLEC12A,MICL,CLL-1,CLL1,DCAL2,DCAL-2,CD371

Source

APC-Labeled Human CLEC12A Protein, His Tag (CLA-HA244) is produced via conjugation of APC to Human CLEC12A Protein, His Tag with a new generation site-specific technology under Star Staining labeling platform. Human CLEC12A Protein, His Tag is expressed from human 293 cells (HEK293). It contains AA His 65 - Ala 265 (Accession # Q5QGZ9-2). Predicted N-terminus: His

Molecular Characterization

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

Conjugate

APC

Excitation Wavelength: 640 nm

Emission Wavelength: 661 nm

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, 0.2% 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.

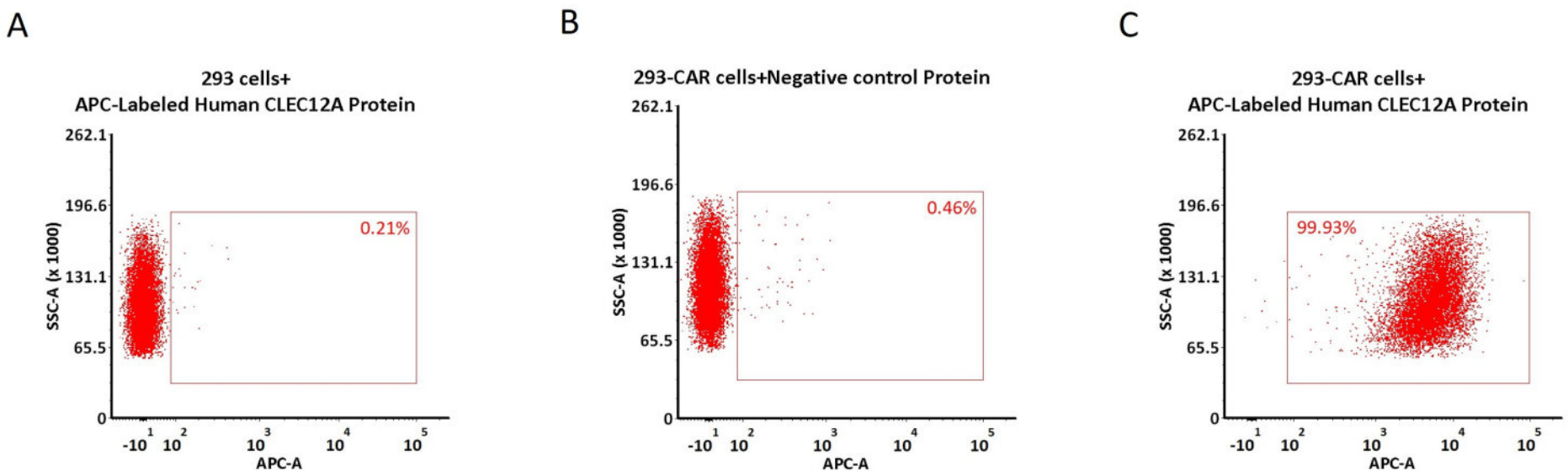
Please protect from light and avoid repeated freeze-thaw cycles.

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.

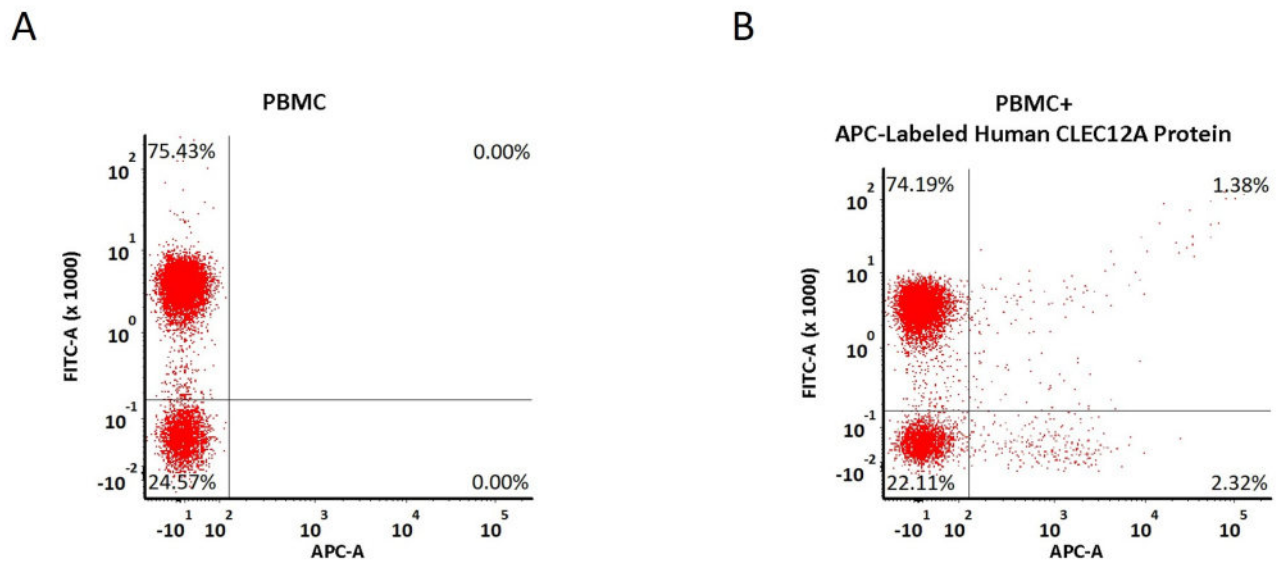
Evaluation of CAR expression

FACS Analysis of Anti-CLEC12A CAR Expression



5e5 of anti-CLEC12A/CLL-1 CAR-293 cells were stained with 100 μL of 1:50 dilution (2 μL stock solution in 100 μL FACS buffer) of APC-Labeled Human CLEC12A Protein, His Tag (Cat. No. CLA-HA244) and negative control protein respectively (Fig. C and B), and non-transfected 293 cells were used as a control (Fig. A). APC signal was used to evaluate the binding activity (QC tested).

FACS Analysis of Non-specific binding to PBMCs



5e5 of PBMCs were stained with APC-Labeled Human CLEC12A Protein, His Tag (Cat. No. CLA-HA244) and anti-CD3 antibody, washed and then analyzed with FACS. FITC signal was used to evaluate the expression of CD3+ T cells in PBMCs, and APC signal was used to evaluate the non-specific binding activity to PBMCs (QC tested).

Background

CLEC12A (C-type lectin domain family 12 member A) is also known as CLL1, DCAL2, MICL. Clec12a is an inhibitory receptor for uric acid crystals that regulates inflammation in response to cell death. Cell surface receptor that modulates signaling cascades and mediates tyrosine phosphorylation of target MAP kinases. Evidence of distinct disease propagating stem cells in myelodysplastic syndrome (MDS) has emerged in recent years. The role of CLEC12A in MDS, however, remains to be elucidated. Furthermore, CLEC12A has been proposed as a promising marker of leukaemic stem cells in AML.