

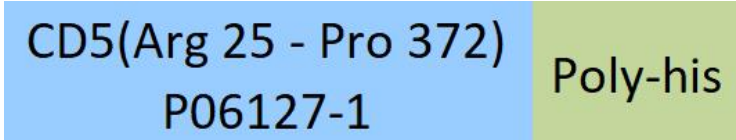
Synonym

CD5,LEU1

Source

PE-Labeled Human CD5, His Tag (CD5-HP2H6) is produced via site-specific conjugation of PE to Human CD5, His Tag under optimal conditions with a proprietary technology. Human CD5, His Tag is expressed from human 293 cells (HEK293). It contains AA Arg 25 - Pro 372 (Accession # [P06127-1](#)).

Predicted N-terminus: Arg 25

Molecular Characterization


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

The protein has a calculated MW of 42.2 kDa.

Application

Evaluation of anti-CD5 CAR expression by flow cytometry. Please note that this product is NOT compatible to streptavidin detection system.

Conjugate

PE

Excitation Wavelength: 488 nm / 561 nm

Emission Wavelength: 575 nm

Formulation

Lyophilized from 0.22 μ m filtered solution in PBS, 0.5% BSA, pH7.4. Normally trehalose is added as protectant before lyophilization.

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.

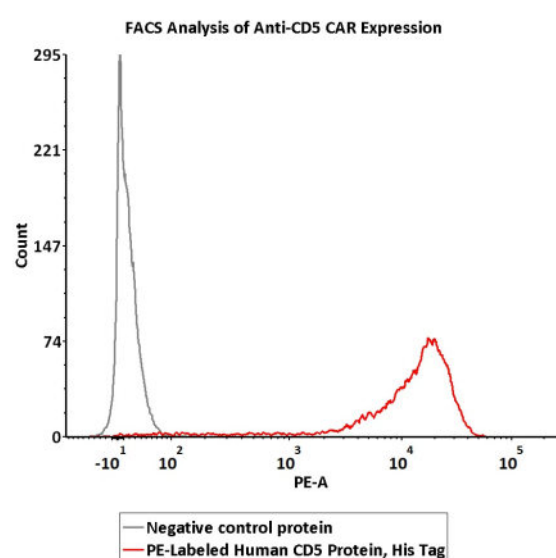
Storage

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 anti-CD5 CAR-293 cells were stained with 100 μ L of 1:25 dilution (4 μ L stock solution in 100 μ L FACS buffer) of PE-Labeled Human CD5, His Tag (Cat. No. CD5-HP2H6) and negative control protein respectively. PE signal was used to evaluate the binding activity (QC tested).

Background

T-cell surface glycoprotein CD5 is also known as Lymphocyte antigen T1/Leu-1 and LEU1, which is phosphorylated on tyrosine residues by LYN, so CD5 can create binding sites for PTPN6/SHP-1. CD5 may act as a receptor in regulating T-cell proliferation. CD5 is expressed at various developmental and activation stages on human B cells. CD5 is a well established negative regulator of TCR and BCR signalling. CD5-positive cells may also prevent the emergence of autoimmunity by provision of cytokines such as IL-10. Development, selection and function of different B- and T-cell subsets or their preferential survival may be directly or indirectly dependent on different glycan structures associated with CD5 or CD5-like molecules.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.