

Synonym

CD5,LEU1

Source

FITC-Labeled Human CD5, His Tag (CD5-H52H2) is expressed from human 293 cells (HEK293). It contains AA Arg 25 - Pro 372 (Accession # [P06127-1](#)). It is the FITC labeled form of Human CD5, His Tag (CD5-H52H5).

Predicted N-terminus: Arg 25

Molecular Characterization

CD5(Arg 25 - Pro 372) P06127-1	Poly-his
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This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 40.5 kDa. The protein migrates as 45-55 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Conjugate

FITC

Excitation source: 488 nm spectral line, argon-ion laser

Excitation Wavelength: 488 nm

Emission Wavelength: 535 nm

Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with FITC using standard chemical labeling method. The residual FITC is removed by molecular seive treatment during purification process.

FITC:Protein Ratio

The FITC to protein molar ratio is 3-5.

EndotoxinLess than 1.0 EU per μg by the LAL method.**Purity**

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, 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.

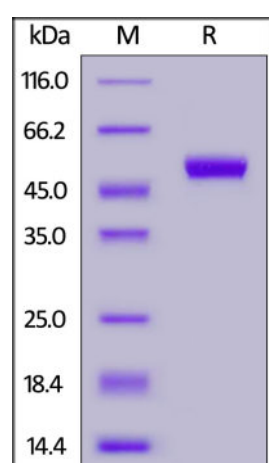
Storage

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.

SDS-PAGE

FITC-Labeled Human CD5, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

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.

References

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