

## **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 # <u>P06127-1</u>). 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

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

The protein has a calculated MW of 40.5 kDa. The protein migrates as 50-60 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> 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 sieve treatment during purification process.

## **Protein Ratio**

The FITC to protein molar ratio is 3-5.

## **Endotoxin**

Less than 1.0 EU per  $\mu g$  by the LAL method / rFC method.

## **Purity**

>95% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from 0.22 µm filtered solution in PBS, 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.

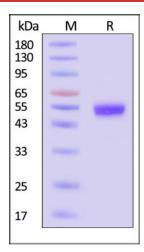
SDS-PAGE



# FITC-Labeled Human CD5 Protein, His Tag

Catalog # CD5-H52H2





FITC-Labeled Human CD5, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

## 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.