



#### Synonym

CD5,LEU1

#### Source

Human CD5, Fc Tag(CD5-H5253) is expressed from human 293 cells (HEK293). It contains AA Arg 25 - Pro 372 (Accession # <u>P06127-1</u>). Predicted N-terminus: Arg 25

#### **Molecular Characterization**

CD5(Arg 25 - Pro 372) Fc(Pro 100 - Lys 330) P01857 P06127-1

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 65.1 kDa. The protein migrates as 70-90 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 0.01 EU per μg by the LAL method / rFC method.

# **Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

### **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

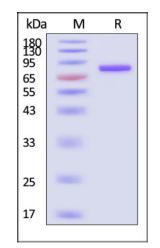
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

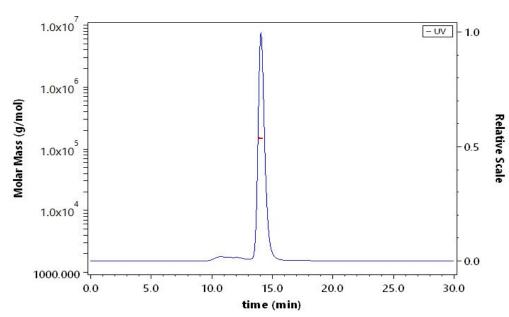
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

# **SDS-PAGE**



Human CD5, Fc 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 Star Ribbon Pre-stained Protein Marker).

### **SEC-MALS**



The purity of Human CD5, Fc Tag (Cat. No. CD5-H5253) is more than 90% and the molecular weight of this protein is around 145-165 kDa verified by SEC-MALS.

Report

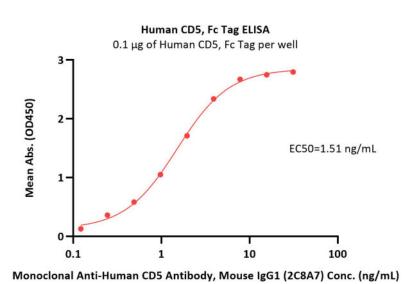
# **Bioactivity-ELISA**



# **Human CD5 Protein, Fc Tag, low endotoxin (MALS verified)**







Immobilized Human CD5, Fc Tag (Cat. No. CD5-H5253) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Monoclonal Anti-Human CD5 Antibody, Mouse IgG1 (2C8A7) with a linear range of 0.1-4  $\mu$ g/mL (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.

