# Human CD74 / DHLAG Protein, Fc Tag (MALS verified)

Catalog # CD4-H5256

## Synonym

CD74,DHLAG,HLADG,II,Ia-GAMMA,p33,CLIP,INVG34

## Source

Human CD74, Fc Tag(CD4-H5256) is expressed from human 293 cells (HEK293). It contains AA Gln 73 - Met 232 (Accession # P04233-2). Predicted N-terminus: Pro

## Molecular Characterization

| Fc(Pro 100 - Lys 330) P01857 | CD74(Gln 73 - Met 232) P04233-2 |
|---|---|

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

The protein has a calculated MW of 47.9 kDa. The protein migrates as 60-65 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

The protein is designed as a trimer.

## Endotoxin

Less than 0.1 EU per μg by the LAL method / rFC method.

## Purity

>90% as determined by SDS-PAGE.

## Formulation

Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 100 mM Glycine, 25 mM Arginine, 150 mM NaCl, pH7.5 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

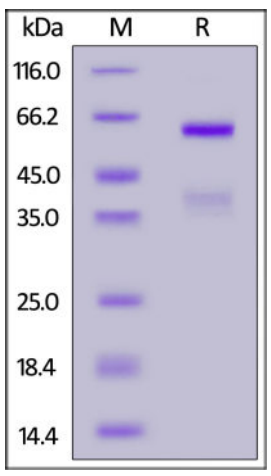
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

***Please avoid repeated freeze-thaw cycles.***

This product is stable after storage at:

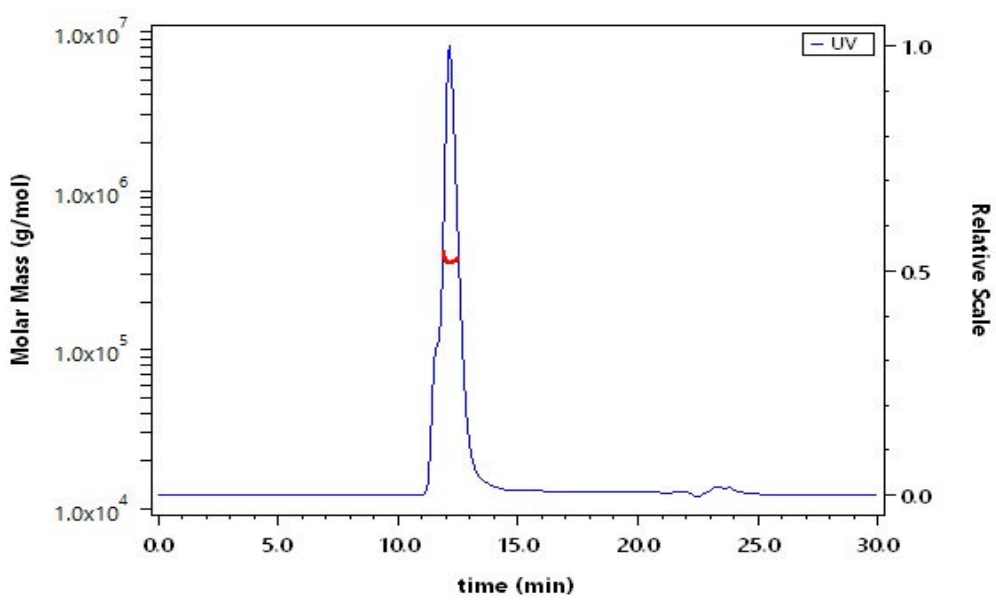
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## SDS-PAGE



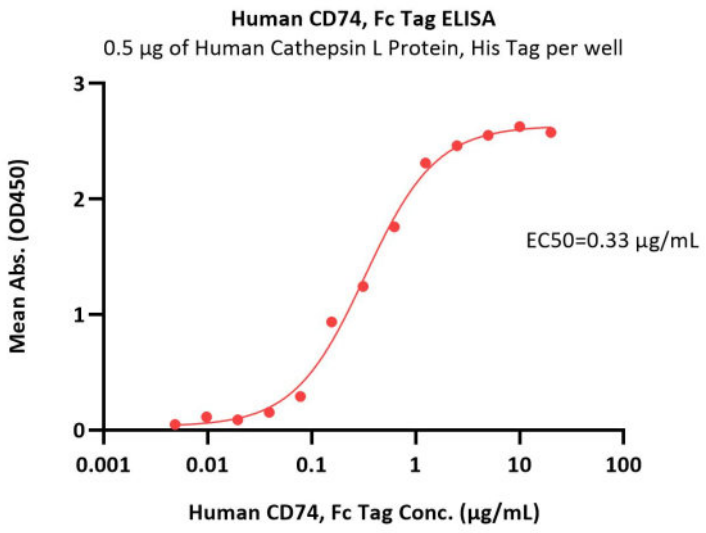

Human CD74, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

## SEC-MALS




The purity of Human CD74, Fc Tag (Cat. No. CD4-H5256) is more than 85% and the molecular weight of this protein is around 320-340 kDa verified by SEC-MALS.
Report

## Bioactivity-ELISA




Immobilized Human Cathepsin L Protein, His Tag (Cat. No. CAL-H52H3) at 5 μg/mL (100 μL/well) can bind Human CD74, Fc Tag (Cat. No. CD4-H5256) with a linear range of 0.005-1.25 μg/mL (Routinely tested).

## Background

Cluster of Differentiation 74 (CD74) is also known as HLA class II histocompatibility antigen gamma chain (HLADG), DHLAG, Ia-GAMMA, invariant chain (Abbreviated Ii). CD74 / HLADG is a polypeptide involved in the formation and transport of MHC class II protein. The cell surface form of the invariant chain is known as CD74. CD74 is upregulated in several cancers and is also expressed by non-immune cells during inflammation. CD74 plays a critical role in MHC class II antigen processing by stabilizing peptide-free class II alpha / beta heterodimers in a complex soon after their synthesis and directing transport of the complex from the endoplasmic reticulum to the endosomal / lysosomal system where the antigen processing and binding of antigenic peptides to MHC class II takes place. CD74 / DHLAG also serves as cell surface receptor for the cytokine MIF.