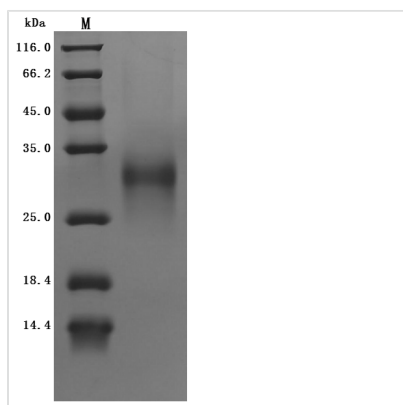


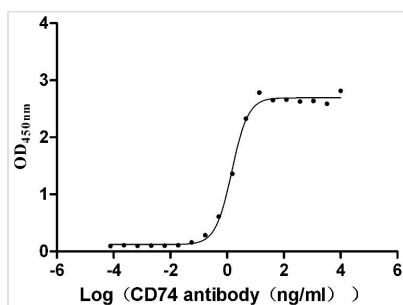


Recombinant Human HLA class II histocompatibility antigen gamma chain (CD74), partial (Active)

Product Code	CSB-MP004956HU1(F2)
Abbreviation	Recombinant Human CD74 protein, partial (Active)
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P04233
Form	Lyophilized powder
Storage Buffer	Lyophilized from a 0.2 µm filtered 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Biological Activity	Measured by its binding ability in a functional ELISA. Immobilized Human CD74 at 2 µg/mL can bind Anti-CD74 recombinant antibody (CSB-RA004956A1HU), the EC ₅₀ is 1.317-1.646 ng/mL.
Purity	Greater than 95% as determined by SDS-PAGE.
Sequence	QQQGRLDKLTVTSQNLQLENLRMKLPKPPKPVSKMRMATPLLMQALPMGALP QGPMQNATKYGNMTEDHVMHLLQNADPLKVYPPLKGSFPENLRHLKNTMETI DWKVFESWMHHWLLFEMSRHSLEQKPTDAPPKESLELEDPSGLGVTKQDL GPVPM
Source	Mammalian cell
Target Names	CD74
Expression Region	73-232aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged
Mol. Weight	21.0 kDa
Protein Length	Partial of Isoform 2
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Activity

Measured by its binding ability in a functional ELISA. Immobilized Human CD74 at 2 µg/ml can bind Anti-CD74 recombinant antibody (CSB-RA004956A1HU), the EC₅₀ is 1.317-1.646 ng/mL.

Description

The recombinant CD74 protein gene sequence Gln73-Met232 fused with an N-terminal 10xHis-tag was inserted into the prokaryotic expression vector to obtain the recombinant plasmid, which was transferred into mammalian cells for further expression. The final product is the recombinant human CD74 protein. Its purity reaches up to 95%. Its endotoxin and activity have been measured.

CD74 is the receptor for the cytokine MIF. CD74-MIF interaction activates CD74/CD44 complex further inducing the activation of ERK, PI3K-Akt, NF-κB, and AMPK pathways involved in cell proliferation and survival. Additionally, CD74-MIF signaling plays a vital role in protecting against injury and promoting healing in different body parts. CD74 also participates in the modulation of T cell and B cell development, dendritic cell (DC) motility, macrophage inflammation, and thymic selection. Many studies have shown that CD74 is complicated in the pathogenesis of many inflammatory diseases, such as Alzheimer's disease, systemic lupus erythematosus, and type I diabetes. CD74 expression has been proposed as a prognostic factor in numerous malignancies, with higher relative expression acting as a sign of tumor progression.

Endotoxin

Less than 1.0 EU/ug as determined by LAL method.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life



of lyophilized form is 12 months at -20°C/-80°C.