

HLA class II histocompatibility antigen gamma chain (CD74) Active Protein | CD74 active protein

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

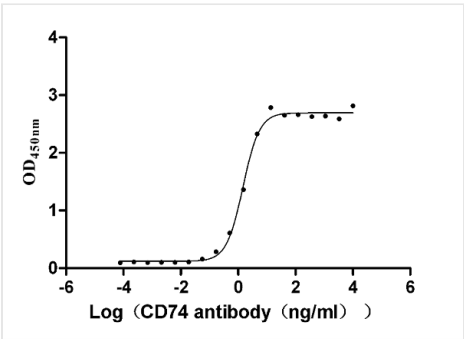
CATALOG # AAA278901	HOST Mammalian Cell
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PRODUCT SYNONYMS

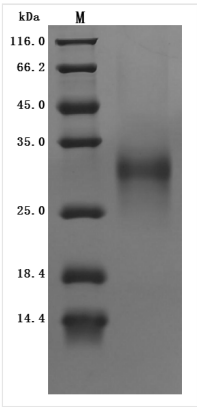
HLA class II histocompatibility antigen gamma chain (CD74); Recombinant Human HLA class II histocompatibility antigen gamma chain (CD74); partial (Active); (HLA-DR antigens-associated invariant chain)(Ia antigen-associated invariant chain)(II)(CD antigen CD74); CD74 active protein

PRODUCT SPECIFICATIONS

Host	Mammalian Cell
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Sequence Positions	73-232aa, Partial of Isoform 2
Sequence	QQQGRLDKLT VTSQNLQLEN LRMKLPKPPK PVSKMRMATP LLMQALPMGA LPQGPMQNAT KYGNMTEDHV MHLLQNADPL KVYPPLKGSF PENLRHLKNT METIDWKVFE SWMHHWLLFE MSRHSLEQKP TDAPPKESLE LEDPSSGLGV TKQDLGPVPM
Species	Homo sapiens (Human)
Endotoxin	Less than 1.0EU/ug as determined by LAL method.
Relevance	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. Serves as cell surface receptor for the cytokine MIF.[Class-II-associated invariant chain peptide]: Binds to the peptide-binding site of MHC class II alpha/beta heterodimers forming an alpha-beta-CLIP complex, thereby preventing the loading of antigenic peptides to the MHC class II complex until its release by HLA-DM in the endosome.[Isoform p41]: Stabilizes the conformation of mature CTSL by binding to its active site and serving as a chaperone to help maintain a pool of mature enzyme in endocytic compartments and extracellular space of antigen-presenting cells (APCs). Has antiviral activity by stymieing the endosomal entry of Ebola virus and coronaviruses, including SARS-CoV-2. Disrupts cathepsin-mediated Ebola virus glycoprotein processing, which prevents viral fusion and entry. This antiviral activity is specific to p41 isoform.
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.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20 degree C/-80 degree C. Our default final concentration of glycerol is 50%. Customers could use it as reference.
Biological Activity	Measured by its binding ability in a functional ELISA. Immobilized Human CD74 at 2ug/mL can bind Anti-CD74 recombinant antibody , the EC50 is 1.317-1.646ng/mL.
Preparation and Storage	Store at -20 degree C. For extended storage, store at -20 or -80 degree C. Repeated freezing and thawing is not recommended. Store working aliquots at 4 degree C for up to one week.



Bioactivity



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

ADDITIONAL INFORMATION

Product Categories/Family for CD74 active protein	Immunology
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NCBI AND UNIPROT INFORMATION

NCBI GI #	20178292
NCBI GeneID	972
UniProt Accession #	P04233; Q14597; Q29832; Q5U0J8; Q8SNA0; Q8WLP6; A8K7R1; B4DNE8; D3DQG3; D3DQG4
Molecular Weight	296
NCBI Official Full Name	HLA class II histocompatibility antigen gamma chain
NCBI Official Synonym Full Names	CD74 molecule, major histocompatibility complex, class II invariant chain
NCBI Official Symbol	CD74
NCBI Official Synonym Symbols	II; DHLAG; HLADG; Ia-GAMMA
NCBI Protein Information	HLA class II histocompatibility antigen gamma chain; p33; HLA-DR-gamma; MHC HLA-DR gamma chain; Ia-associated invariant chain; gamma chain of class II antigens; HLA-DR antigens-associated invariant chain; CD74 antigen (invariant polypeptide of major histo
UniProt Protein Name	HLA class II histocompatibility antigen gamma chain
UniProt Gene Name	CD74
UniProt Synonym Gene Names	DHLAG; li
UniProt Entry Name	HG2A_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.