

# Recombinant Human CD74 molecule, major histocompatibility complex, class II invariant chain, His-tagged

**Cat. No.** CD74-589H    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | CD74, 73-232aa, Human, His tag, E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>ProteinLength</b>    | 73-232 a.a.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Description</b>      | HLA class II histocompatibility antigen gamma chain isoform b, also known as CD74, is a transmembrane protein which, on antigen presenting cells, is the invariant chain that chaperones MHC class II dimers from the endoplasmic reticulum to the cell surface. CD74 is expressed by cells of both T lymphocyte and B lymphocyte lineages. It is upregulated in several cancers and is also expressed by nonimmune cells during inflammation. Recombinant human CD74 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques. |
| <b>Form</b>             | Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.1M NaCl, 30% glycerol, 1mM DTT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Molecular Mass</b>   | 20.6kDa (183aa) confirmed by MALDI-TOF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>AA Sequence</b>      | MGSSHHHHHH SSGLVPRGSH MGSQQQGRLD KLTVTSQNLQ LENLRMKLPK<br>PPKPVSKMRM ATPLLMQALP MGALPQGPMQ NATKYGNMTE DHVMHLLQNA<br>DPLKVYPPLK GSFPENLRHL KNTMETIDWK VFESWMHHWL LFEMSRHSLE                                                                                                                                                                                                                                                                                                                                                                                                                           |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

QKPTDAPPKE SLELEDPSSG LGVTKQDLGP VPM

**Purity** >90% by SDS - PAGE

**Storage** Can be stored at +4C short term (1-2 weeks). For long term storage, aliquot and store at -20C or -70C. Avoid repeated freezing and thawing cycles.

**Concentration** 0.5 mg/ml (determined by Bradford assay)

## GENE INFORMATION

**Gene Name** CD74 CD74 molecule, major histocompatibility complex, class II invariant chain [ Homo sapiens ]

**Official Symbol** CD74

**Synonyms** CD74; CD74 molecule, major histocompatibility complex, class II invariant chain; CD74 antigen (invariant polypeptide of major histocompatibility complex, class II antigen associated) , DHLAG; HLA class II histocompatibility antigen gamma chain; gamma chain of class II antigens; HLA DR gamma; Ia associated invariant chain; MHC HLA DR gamma chain; p33; HLA-DR-gamma; MHC HLA-DR gamma chain; Ia-associated invariant chain; HLA-DR antigens-associated invariant chain; CD74 antigen (invariant polypeptide of major histocompatibility complex, class II antigen-associated); II; DHLAG; HLADG; Ia-GAMMA; FLJ98970;

**Gene ID** 972

**mRNA Refseq** NM\_001025158

**Protein Refseq** NP\_001020329

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                            |                                                                                                                                                                                                                                                                                                                 |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>MIM</b>                 | 142790                                                                                                                                                                                                                                                                                                          |
| <b>UniProt ID</b>          | P04233                                                                                                                                                                                                                                                                                                          |
| <b>Chromosome Location</b> | 5q31-q33                                                                                                                                                                                                                                                                                                        |
| <b>Pathway</b>             | Antigen processing and presentation, organism-specific biosystem; Antigen processing and presentation, conserved biosystem; Herpes simplex infection, organism-specific biosystem; Herpes simplex infection, conserved biosystem; Tuberculosis, organism-specific biosystem; Tuberculosis, conserved biosystem; |
| <b>Function</b>            | MHC class II protein binding; MHC class II protein binding; beta-amyloid binding; cytokine binding; cytokine receptor activity; identical protein binding; nitric-oxide synthase binding;                                                                                                                       |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA