

Recombinant Human CD74, His-tagged

Cat. No. CD74-114H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant human CD74, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.
Species	Human
Source	Insect Cells
Description	<p>CD74, also known as HLA class II histocompatibility antigen gamma chain or HLA-DR antigens-associated invariant chain or CD74 (Cluster of Differentiation 74). The nascent MHC class II protein in the rough ER has its peptide-binding cleft blocked by the invariant chain (Ii; a trimer) to prevent it from binding cellular peptides or peptides from the endogenous pathway. The invariant chain also facilitates MHC class II's export from the ER in a vesicle. The signal for endosomal targeting resides in the cytoplasmic tail of the invariant chain. This fuses with a late endosome containing the endocytosed, degraded proteins. It is then cleaved by cathepsin S (cathepsin L in cortical thymic epithelial cells), leaving only a small fragment called CLIP which blocks peptide binding until HLA-DM binds to MHC II, releasing CLIP and allowing other peptides to bind. The stable MHC class-II is then presented on the cell surface.</p>
Form	Liquid. In phosphate buffered saline (pH7.4) containing 10% glycerol.
Molecular Mass	19.05kDa (166aa)18-28kDa (SDS-PAGE under reducing conditions.)
AA Sequence	<p>QQQGRLDKLT VTSQNLQLEN LRMKLPKPPK PVSKMRMATP LLMQALPMGA LPQGPMQNAT KYGNMTEHDV MHLLQNADPL KVYPPLKGSFPENLRHLKNT</p>

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

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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

METIDWKVFE SWMHHWLLFE MSRHSLEQKP TDAPPKESLE LEDPSSGLGV
TKQDLGPVPM HHHHHH

Endotoxin < 1.0 eu per 1 microgram of protein (determined by lal)

Purity >85% 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 0.5mg/ml (determined by absorbance at 280nm)

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](#)

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

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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

Protein Refseq	NP_001020329
MIM	142790
UniProt ID	P04233
Chromosome Location	5q31-q33
Pathway	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;
Function	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  Fax: 1-631-938-8127

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