

**CD74, 73-232aa, Human, His tag, Insect cell****Cat.NO.: TP01533**

3th Edition

**Synonyms:**HLA class II histocompatibility antigen gamma chain isoform b, DHLAG, HLADG, Ia-GAMMA II

**Description:**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. Recombinant human CD74, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

**Form:**Liquid. In phosphate buffered saline (pH7.4) containing 10% glycerol.

**Molecular Weight:**19.05kDa (166aa) 18-28kDa (SDS-PAGE under reducing conditions.)

**Sequences:**

QQQGRLDKLTVTSQNLQLENLRMKLPKPPKPVSKMRMATPLLMQALPMGALPQGPMQNATKYGNMTEDHVMHLL  
QNADPLKVYPPLKGSFPENLRHLKNTMETIDWKVFESWMHHWLLFEMSRHSLEQKPTDAPPKESLELEDPSGLG  
VTKQDLGPVPMHHHHHHH

**Purity:**> 95% by HPLC

**Concentration:**0.5mg/ml (determined by absorbance at 280nm)

**Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

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