

Recombinant Protein Technical Manual Recombinant Mouse CD74 Protein (His Tag)

RPES3133

## Product Data:

Product SKU: RPES3133

Species: Mouse

**Size:** 10µg

Expression host: Human Cells

**Uniprot:** NP\_004346.1

Protein Information:	
Molecular Mass:	19.4 kDa
AP Molecular Mass:	25-30 kDa
Tag:	C-6His
Bio-activity:	
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per $\mu g$ as determined by the LAL method.
Storage:	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from a 0.2 $\mu$ m filtered solution of PBS, pH7.4.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Cluster of Differentiation 74;CD74 antigen; CD74 molecule, major histocompatibility complex, class II invariant chain; DHLAG gamma chain of class II antigens; HLA class II histocompatibility antigen gamma chain; HLADG; HLA-DR antigens-associated invariant chain; HLA-DR-gamma; Ia antigen-associated invariant chain; Ia-associated invariant chain; Ia-GAMMA; MHC HLA-DR gamma chain; CD74; DHLAG; HLADG; Ia-gamma; INVG34;

## Sequence: Gln56-Leu215

## Background:

Mouse HLA class II histocompatibility antigen gamma chain (CD74), is a single-pass type II membrane glycoprotein which contains 1 thyroglobulin type domain. Mouse CD74 shares 75% and 88% aa sequence identity with human and rat CD74, respectively. CD74 plays an important role in adaptive immunity, inflammation, and cancer. It 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 compartments where peptide loading of class II takes place. CD74 also associates with CD44 and binds with high affinity to the cytokine MIF, leading to inflammatory leukocyte responses, protection from tissue fibrosis, B cell proliferative and survival signaling, and the up-regulation of angiogenic factors in endometrial stromal cells.