

# CD74 Antibody

Rabbit mAb Catalog # AP91135

## **Product Information**

Application	WB, IHC, IF, FC, ICC, IHF
Primary Accession	<u>P04233</u>
Reactivity	Human
Clonality	Monoclonal
Other Names	CD74 antigen; CD74 molecule; CLIP; DHLAG;
lsotype	Rabbit IgG
Host	Rabbit
Calculated MW	33516

### **Additional Information**

Dilution Purification	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 FC 1:50 Affinity-chromatography
Immunogen	A synthesized peptide derived from human CD74
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

#### **Protein Information**

Name	CD74 ( <u>HGNC:1697</u> )
Synonyms	DHLAG
Function	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. [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 (PubMed:32855215). Disrupts cathepsin-mediated Ebola virus glycoprotein processing, which prevents viral

	fusion and entry. This antiviral activity is specific to p41 isoform (PubMed: <u>32855215</u> ).
Cellular Location	Cell membrane; Single-pass type II membrane protein. Endoplasmic reticulum membrane. Golgi apparatus, trans-Golgi network. Endosome. Lysosome. Secreted. Note=Transits through a number of intracellular compartments in the endocytic pathway. It can either undergo proteolysis or reach the cell membrane
Tissue Location	Detected in urine (at protein level). [Isoform p33]: In B cells, represents 70% of total CD74 expression.

#### Images



Western blot analysis of CD74 expression in Ramos cell lysate.

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