



## Rabbit Anti-CD74 antibody

SL2518R

<b>Product Name:</b>	CD74
<b>Chinese Name:</b>	CD74抗体
<b>Alias:</b>	CD 74; CD74; CD74 antigen; CD74 molecule; CLIP; DHLAG; Gamma chain of class II antigens; HG2A_HUMAN; HLA class II histocompatibility antigen gamma chain; HLA DR antigens associated invariant chain; HLA DR gamma; HLA-DR antigens-associated invariant chain; HLA-DR-gamma; HLADG; HLADR antigens associated invariant chain; Ia antigen associated invariant chain; Ia antigen-associated invariant chain; Ia associated invariant chain; Ia gamma; Ii; Invariant polypeptide of major histocompatibility complex class II antigen associated; Ia-gamma; Major histocompatibility complex class II invariant chain; MHC HLA DR gamma chain; MHC HLA-DR gamma chain; p33; p35; Protein 41.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000Flow-Cyt=1µg/Test not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	34kDa
<b>Cellular localization:</b>	The cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human CD74:151-250/296
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>

CD74, also known as the MHC class II associated invariant chain (Ii), is a type II transmembrane protein which binds to the peptide binding groove of newly synthesized MHC class II alpha/beta heterodimers and prevents their premature association with endogenous polypeptides. CD74 is produced in molar excess over MHC class II and some of this is expressed by an unknown pathway on the cell surface independent of, or in association with, MHC class II molecules. The half life of CD74 on the cell surface is only 3 to 4 min after which it is internalized. It has been proposed that cell surface CD74 binds The protein encoded by this gene associates with class II major histocompatibility complex (MHC) and is an important chaperone that regulates antigen presentation for immune response. It also serves as cell surface receptor for the cytokine macrophage migration inhibitory factor (MIF) which, when bound to the encoded protein, initiates survival pathways and cell proliferation. This protein also interacts with amyloid precursor protein (APP) and suppresses the production of amyloid beta (Abeta). Multiple alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Aug 2011]

**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.

**Subunit:**

Homotrimer. In the endoplasmic reticulum (ER) it forms a heterononameric MHC II-Ii complex: 3 MHC class II molecules (heterodimers of an alpha and a beta subunit) bind to the CD74 homotrimer (also known as invariant chain or HLA class II histocompatibility antigen gamma chain). In the endosomal/lysosomal system, the CD74 component undergoes sequential degradation by various proteases, including CTSS and CTSL, leaving a small fragment termed CLIP (class-II-associated invariant chain peptide) attached to the MHC class II molecule (alpha-beta-CLIP complex). This processed complex interacts with HLA\_DM and HLA\_DO heterodimers in order to release CLIP and facilitate the binding of antigenic peptides to the MHC class II molecules.

**Subcellular Location:**

Cell membrane; Single-pass type II membrane protein (Potential). Endoplasmic reticulum membrane. Golgi apparatus, trans-Golgi network. Endosome. Lysosome. Note=Transits through a number of intracellular compartments in the endocytic pathway. It can either undergo proteolysis or reach the cell membrane.

**Post-translational modifications:**

N- and O-glycosylated. O-glycosylated with core 1 or possibly core 8 glycans.

**DISEASE:**

Note=A chromosomal aberration involving CD74 is found in a non-small cell lung

**Product Detail:**

tumor. Results in the formation of a CD74-ROS1 chimeric protein.

**Similarity:**

Contains 1 thyroglobulin type-1 domain.

**SWISS:**

P04233

**Gene ID:**

972

**Database links:**

[Entrez Gene: 972](#)Human

[Entrez Gene: 16149](#)Mouse

[Omin: 142790](#)Human

[SwissProt: P04233](#)Human

[SwissProt: P04441](#)Mouse

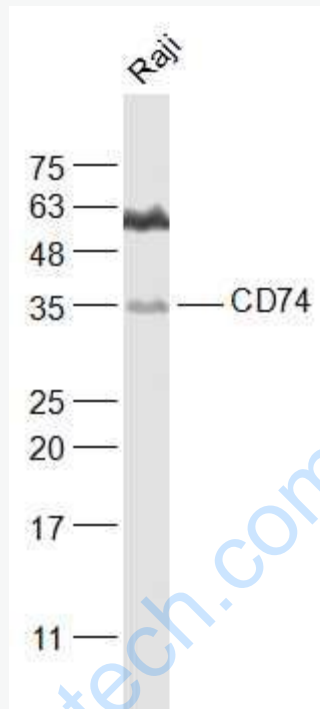
[Unigene: 436568](#)Human

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

CD74表达于所有B细胞和某些T细胞亚类(MHC II阳性),具有几种异构体形式(33, 35和41kDa),是HLA-DR的恒定链。该抗体主要用于标记生发中心及外套B细胞(80%)和R-S细胞(70%)以及少数T细胞(20%),常与其它B细胞标记如CD20或CD45RA联合检测,用于B细胞淋巴瘤的辅助诊断。

Picture:



Sample:

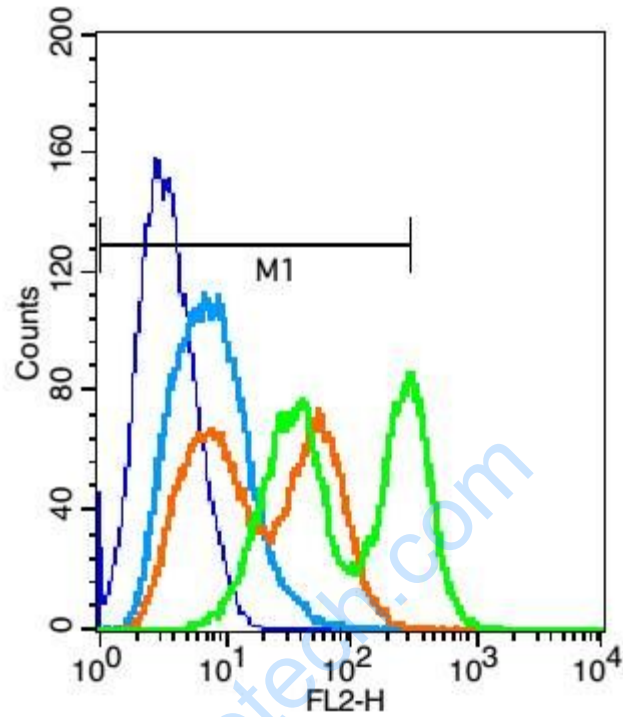
Raji(Human) Cell Lysate at 30 ug

Primary: Anti-CD74 (SL2518R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 34 kD

Observed band size: 34 kD



Blank control(blue): Raji cells(fixed with 2% paraformaldehyde (10 min)) .

Primary Antibody:Rabbit Anti-CD74 antibody(SL2518R), Dilution: 1 $\mu$ g in 100  $\mu$ L

1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions );

Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X

PBS containing 0.5% BSA.