

Basic Information

Product Name	Anti-CD74 Antibody	
Gene Name	CD74	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, IHC, IF, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human CD74 recombinant protein (Position: Q73-M296).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	34 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunofluorescence (IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA): 1:100-1000 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

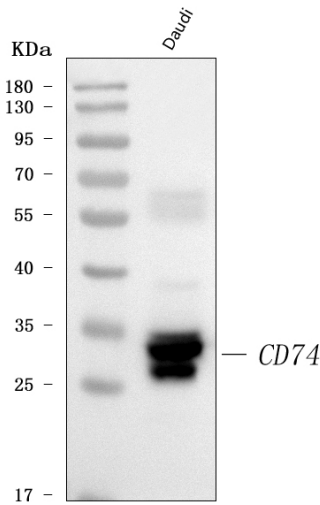
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

HLA class II histocompatibility antigen gamma chain also known as HLA-DR antigens-associated invariant chain or CD74 (Cluster of Differentiation 74), is a protein that in humans is encoded by the CD74 gene. 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 (Aβeta). Multiple alternatively spliced transcript variants encoding different isoforms have been identified.

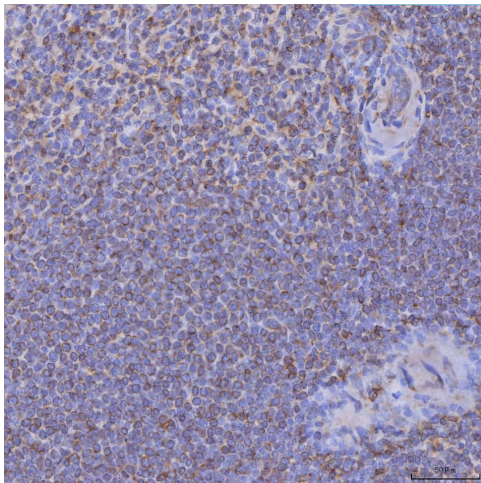
Selected Validation Data



Western blot analysis of CD74 using anti-CD74 antibody (A01340-4). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

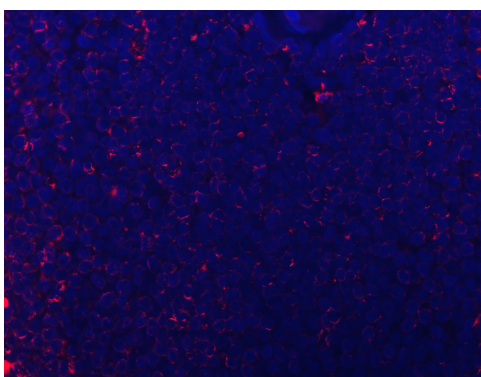
Lane 1: human Daudi whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-CD74 antigen affinity purified polyclonal antibody (A01340-4) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for CD74 at approximately 34 kDa. The expected band size for CD74 is at 34 kDa.

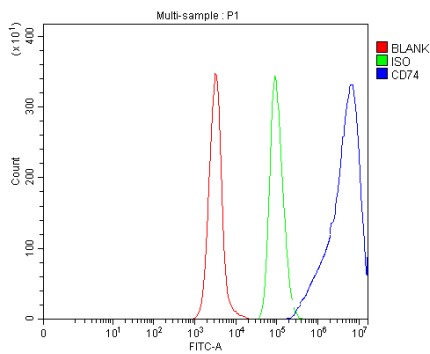


IHC analysis of CD74 using anti-CD74 antibody (A01340-4).

CD74 was detected in a paraffin-embedded section of human spleen tissue. The tissue section was incubated with rabbit anti-CD74 Antibody (A01340-4) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



IF analysis using anti-CD74 antibody (A01340-4). detected in paraffin-embedded section of human spleen tissue. The tissue section were stained using the Dylight594-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog # BA1142) and counterstained with DAPI (blue).



Flow Cytometry analysis of Daudi cells using anti-CD74 antibody (A01340-4).

Overlay histogram showing Daudi cells stained with A01340-4 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CD74 Antibody (A01340-4) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.