

Mouse anti-Human CD74 Monoclonal Antibody | anti-CD74 antibody

CD74 Antibody, Clone 1B8: FITC

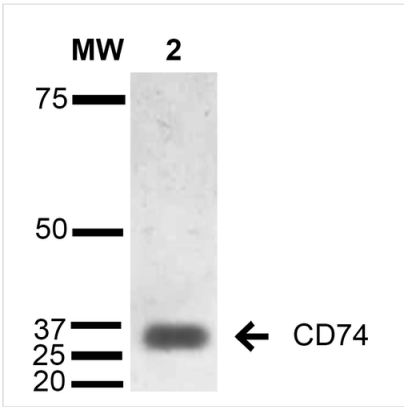
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA103937	Mouse	Human	Immunofluorescence, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

CD74; Monoclonal Antibody; CD74 Antibody; Clone 1B8: FITC; Mouse Anti-Human CD74 Monoclonal IgG2a; CD74 Antibody: FITC; DHLAG Antibody; HLA DR gamma Antibody; HLADG Antibody; p33 Antibody; p35 Antibody; Protein 41 Antibody; CD 74 Antibody; CD74 antigen (invariant polypeptide of major histocompatibility complex; class II antigen-associated) Antibody; CD74 antigen Antibody; CD74 molecule Antibody; CD74 molecule; major histocompatibility complex; class II invariant chain Antibody; CLIP Antibody; Gamma chain of class II antigens Antibody; HG2A_HUMAN Antibody; HLA class II histocompatibility antigen gamma chain Antibody; HLA DR antigens associated invariant chain Antibody; HLA-DR antigens-associated invariant chain Antibody; HLA-DR-gamma Antibody; HLADR antigens associated invariant chain Antibody; Ia antigen associated invariant chain Antibody; Ia antigen-associated invariant chain Antibody; Ia associated invariant chain Antibody; Ia gamma Antibody; li Antibody; Invariant polypeptide of major histocompatibility complex class II antigen associated Antibody; Ia-gamma Antibody; Major histocompatibility complex class II invariant chain Antibody; MHC HLA DR gamma chain Antibody; MHC HLA-DR gamma chain Antibody; anti-CD74 antibody

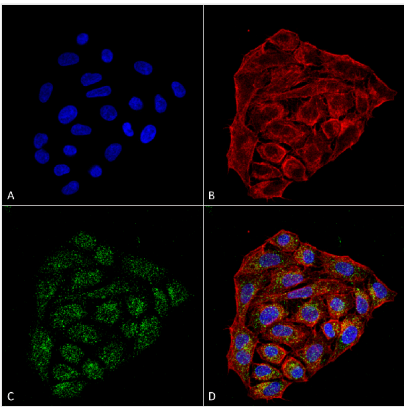
PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG2a
Clone Number	1B8
Specificity	Detects ~33 kDa protein.
Purity/Purification	Protein G Purified
Concentration	1 mg/ml (varies by lot)
Sequence Length	160
Applicable Applications for anti-CD74 antibody	IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Target	CD74
Immunogen	Human CD74 invariant chain synthetic peptide.
Immunogen Species	Human
Cellular Localization	Cell Membrane; Endoplasmic Reticulum; Endoplasmic Reticulum Membrane; Golgi Apparatus; Endosome; Lysosome
Conjugate	FITC
Storage Buffer	PBS pH 7.4, 50% glycerol, 0.09% Sodium Azide
Preparation and Storage	Store at -20 degree C.



WB (Western Blot)

Western Blot analysis of Human Lymphoblastoid cell line (Raji) showing detection of 33-35 kDa CD74 protein using Mouse Anti-CD74 Monoclonal Antibody, Clone 1B8. Lane 1: Molecular Weight Ladder (MW). Lane 2: Raji cell lysate. Load: 15 ug. Block: 5% Skim Milk in TBST. Primary Antibody: Mouse Anti-CD74 Monoclonal Antibody at 1:1000 for 2 hours at RT. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:1000 for 60 min at RT. Color Development: ECL solution for 5 min in RT. Predicted/Observed Size: 33-35 kDa.



ICC (Immunocytochemistry)

Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-CD74 Monoclonal Antibody, Clone 1B8. Tissue: HeLa Cells (Human Cervical Cancer). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-CD74 Monoclonal Antibody at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:200 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60 min at RT, 5 min at RT. Localization: Cell membrane, Endoplasmic Reticulum, Golgi apparatus. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) CD74 Antibody (D) Composite.

ADDITIONAL INFORMATION

Related Product Information for anti-CD74 antibody	CD74 is a non-polymorphic type II integral membrane protein. It has a short N-terminal cytoplasmic tail of 28 amino acids, followed by a single 24-aa transmembrane region and an approximately 150-aa luminal domain (1). The CD74 chain is thought to function mainly as an MHC class II chaperone, which promotes ER exit of MHC class II molecules, directs them to endocytic compartments, prevents peptide binding in the ER, and contributes to peptide editing in the MHC class II compartment. Class II MHC and li expression was believed to be restricted to classical antigen-presenting cells (APC); however, during inflammation, other cell types, including mucosal epithelial cells, have also been reported to express class II MHC molecules (2). Experiments that investigate cell-surface CD74 are complicated by the fact that CD74 remains on the cell surface for a very short time. The surface half-life of CD74 was calculated to be fewer than 10 minutes (3). CD74 however has also recently been shown to have a role as an accessory-signaling molecule because of its high-affinity binding to the pro-inflammatory cytokine, macrophage migration-inhibitory factor (MIF) (3). The restricted expression of CD74 by normal tissues and its very rapid internalization make CD74 an attractive therapeutic target for both cancer and immunologic diseases (4).
Product Categories/Family for anti-CD74 antibody	Antibodies; Immunology; Adaptive Immunity; B Cells; B Cell CD Markers
References	1. Becker-Hermann, S., Arie, G., Medvedovsky H, Kerem A, and Shachar I. (2005) Mol Bio Cell. 16(11):5061-9. 2. Barrera CA., et al (2005) J Histochem Cytochem 53 (12): 1481-9. 3. Starlets D., et al. (2006) Blood. 107 (12): 4807-4816. 4. Burton JD., et al. (2004). Clin Cancer Res. 10(19): 6606-11. 5. Denzin L.K., Hammond, C. and Cresswell, P. (1996) J. Exp. Med. 184: 2153-2165. 6. Denzin L.K., Robbins N.F., Carboy-Newcomb C. and Cresswell P. (1994) Immunity 1: 595-606.

NCBI AND UNIPROT INFORMATION

NCBI GI #	68448537
NCBI GeneID	972
NCBI Accession #	NP_001020329.1
NCBI GenBank Nucleotide #	NM_001025158.2
UniProt Accession #	P04233; Q14597; Q29832; Q5U0J8; Q8SNA0; Q8WLP6; A8K7R1; B4DNE8; D3DQG3; D3DQG4
Molecular Weight	18,328 Da
NCBI Official Full Name	HLA class II histocompatibility antigen gamma chain isoform c

NCBI Official Synonym Full Names	CD74 molecule
NCBI Official Symbol	CD74
NCBI Official Synonym Symbols	II; DHLAG; HLADG; Ia-GAMMA
NCBI Protein Information	HLA class II histocompatibility antigen gamma chain
UniProt Protein Name	HLA class II histocompatibility antigen gamma chain
UniProt Gene Name	CD74
UniProt Synonym Gene Names	DHLAG; li

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/cd74-antibody-clone-1b8-immunofluorescence-immunocytochemistry-western-blot-elisa/103937>