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

CD74 Antibody: FITC

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA103344	**Mouse**	**Human**	**Flow Cytometry, Functional Assay, Immunocytochemistry, Immunoprecipitation, Western Blot**

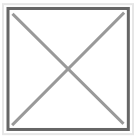
PRODUCT SYNONYMS

CD74; Monoclonal Antibody; CD74 Antibody: FITC; DHLAG; HLA DR gamma; HLADG; p33; p35; Protein 41 antibody; anti-CD74 antibody

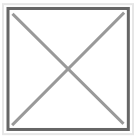
PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1
Clone Number	PIN.1
Form/Format	Protein G Purified
Concentration	1mg/mL (varies by lot)
Sequence Length	160
Applicable Applications for anti-CD74 antibody	FCM/FACS (Flow Cytometry), ICC (Immunocytochemistry), IP (Immunoprecipitation), WB (Western Blot)
Conjugate	FITC
Storage Buffer	PBS pH7.2, 50% glycerol, 0.09% sodium azide
Preparation and Storage	-20 degree C

IMAGES



ICC (Immunocytochemistry)
Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-CD74 Monoclonal Antibody, Clone PIN 1.1. Tissue: HaCaT cells. Species: Human. Fixation: Cold 100% methanol for 10 minutes at -20 degree C. Primary Antibody: Mouse Anti-CD74 Monoclonal Antibody at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Cytoplasmic Staining.



WB (Western Blot)
Western Blot analysis of Human N87 cell lysates showing detection of CD74 protein using Mouse Anti-CD74 Monoclonal Antibody, Clone PIN 1.1. Primary Antibody: Mouse Anti-CD74 Monoclonal Antibody at 1:1000. Lysates treated with macrophage inhibitory factor (MIF). Courtesy of: Victor E. Reyes, University of Texas Medical Branch, USA.



IHC (Immunohistochemistry)
Immunohistochemistry analysis using Mouse Anti-CD74 Monoclonal Antibody, Clone PIN 1.1. Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-CD74 Monoclonal Antibody at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Beautiful basal to suprabasal staining in epidermis, dermis, hair follicles and muscle.

ADDITIONAL INFORMATION

Related Product Information for anti-CD74 antibody	**Background Info:** Detects~33-35kDa protein doublet corresponding to the molecular mass of the p33 and p35 forms of human CD74 on SDS PAGE immunoblots. **Scientific Background:** 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 lumenal 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 Ii 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	Cell Signaling
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, major histocompatibility complex, class II invariant chain
NCBI Official Symbol	CD74
NCBI Official Synonym Symbols	II; DHLAG; HLADG; Ia-GAMMA
NCBI Protein Information	HLA class II histocompatibility antigen gamma chain; p33; HLA-DR-gamma; MHC HLA-DR gamma chain; Ia-associated invariant chain; gamma chain of class II antigens; HLA-DR antigens-associated invariant chain; CD74 antigen (invariant polypeptide of major histocompatibility complex, class II antigen-associated)
UniProt Protein Name	HLA class II histocompatibility antigen gamma chain
UniProt Gene Name	**CD74**
UniProt Synonym Gene Names	DHLAG; Ii
UniProt Entry Name	HG2A_HUMAN

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-pin-1-flow-cytometry-immunocytochemistry-immunoprecipitation-western-blot-elisa/103344