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## AM32811PU-S Monoclonal Antibody to CD74 - Purified

Alternate names:	DHLAG, HLA class II histocompatibility antigen gamma chain, HLA-DR antigens- associated invariant chain, Ia antigen-associated invariant chain, p33
Quantity:	0.1 mg
Concentration:	0.2 mg/ml
Background:	CD74, a Type-II transmembrane protein, is a unique member of RIP-processed protein family. It consists of an extracytoplasmic domain, a transmembrane segment and an intracytoplasmic domain. It is expressed in B-cells, monocytes, macrophages and other Class II MHC expressing cells. CD74 associates with alpha and beta chains of HLA-DR (MHC class II) and directs intracellular sorting of MHC class II molecules. It has a prominent role in antigen presentation and as an accessory signaling molecule. Cell-surface CD74 binds to MIF and its expression is required for MIF-mediated ERK1/2-phosphorylation, PGE2 production and cell proliferation. CD74 regulates B-cell differentiation and acts as a survival receptor through activation of NF-kB p65/RelA homodimer. Pathological role of CD74 has been identified in different cancers including Multiple Myeloma.
Uniprot ID:	<u>P04233</u>
NCBI:	<u>NP_001020329</u>
GenelD:	<u>972</u>
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10P (for use in human samples), AM03095PU-N
Clone:	LN2
Immunogen:	SU-DHL-4 lymphoma cells.
Format:	<ul> <li>State: Liquid purified IgG fraction from Bioreactor Concentrate</li> <li>Purification: Protein A/G Chromatography</li> <li>Buffer System: 10 mM PBS</li> <li>Preservatives: 0.05% Sodium Azide</li> <li>Stabilizers: 0.05% BSA</li> </ul>
Applications:	<ul> <li>ELISA: For coating, Use Antibody without BSA.</li> <li>Western Blot: 0.5-1 μg/ml.</li> <li>Flow Cytometry: 0.5-1 μg/10<sup>6</sup> cells.</li> <li>Immunofluorescence: 1-2 μg/ml.</li> <li>Immunoprecipitation: 1-2 μg/500 μg protein lysate.</li> <li>Immunohistochemistry on Frozen and Paraffin Sections: 0.5-1 μg/ml for 30 minutes at RT.</li> <li>Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes.</li> <li><i>Positive Control</i>: Daudi Cells or Raji Cells. Tonsil or lymph node.</li> </ul>

For research and in vitro use only. Not for diagnostic or therapeutic work. Material Safety Datasheets are available at www.acris-antibodies.com or on request.

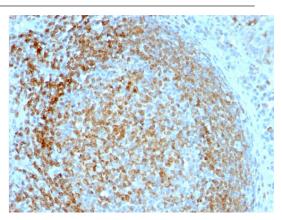
	AM32811PU-S: Monoclonal Antibody to CD74 - Purified
	Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Molecular Weight:	33-41 kDa
Specificity:	This monoclonal LN2 antibody can be used for the identification of B cell lymphoma and leukemias. It also stains activated neoplastic cells in T cell lymphomas and Sternberg-reed cells. It recognizes a protein of ~35kDa, identified as CD74 (Workshop IV). Anti-CD74 stains predominantly germinal center lymphocytes and B-cell lymphomas, but rarely T-cell lymphomas. Anti-CD74 has been shown to be useful in differentiating atypical fibroxanthoma (-) from malignant fibrous histiocytoma (+). <i>Cellular Localization</i> : Cell surface and paranuclear globular. <b>Negative Species:</b> Rat.
Species Reactivity:	Tested: Human, Baboon and Mouse.
Storage:	Store undiluted at 2-8°C. Shelf life: one year from despatch.
Product Citations:	Originator or purchased from resellers: 1. Zheng YX, Yang M, Rong TT, Yuan XL, Ma YH, Wang ZH, et al. CD74 and macrophage migration inhibitory factor as therapeutic targets in gastric cancer. World J Gastroenterol. 2012 May 14;18(18):2253-61. doi: 10.3748/wjg.v18.i18.2253. PubMed PMID: 22611320.
General Readings:	<ol> <li>Leng et.al JEM 197 (11); 1467-1476 (June 2003).</li> <li>Becker-Herman et.al MBC 16 (11) 5061-5069 (November 2005).</li> <li>Diana et.al Blood 107 (12) 4807-4816 (15 June 2006).</li> <li>Ioachim HL, Pambuccian S, Giancotti F, Dorsett B. Reactivity of lung tumors with lung-derived and non-lung-derived monoclonal antibodies. Int J Cancer Suppl. 1994;8:132-3. PubMed PMID: 7515026.</li> <li>Epstein AL, Marder RJ, Winter JN, Fox RI. Two new monoclonal antibodies (LN-1, LN-2) reactive in B5 formalin-fixed, paraffin-embedded tissues with follicular center and mantle zone human B lymphocytes and derived tumors. J Immunol. 1984 Aug;133(2):1028-36. PubMed PMID: 6376628.</li> <li>Marder RJ, Variakojis D, Silver J, Epstein AL. Immunohistochemical analysis of human lymphomas with monoclonal antibodies to B cell and Ia antigens reactive in paraffin sections. Lab Invest. 1985 May;52(5):497-504. PubMed PMID: 3887032.</li> <li>Kumar S, Kumar D, Gourley WK, Alperin JB. Sporotrichosis as a presenting manifestation of hairy cell leukemia. Am J Hematol. 1994 Jun;46(2):134-7. PubMed PMID: 8172180.</li> </ol>

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## **ORIGENE** AM32811PU-S: Monoclonal Antibody to CD74 - Purified

**Pictures:** 

Formalin-Fixed, Paraffin-Embedded Human tonsil stained with CD74 Antibody Cat.-No AM32811PU (Clone LN2).



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