

CD74 (C-16): sc-5438



The Power to Question

BACKGROUND

The human histocompatibility leukocyte antigen (HLA) class II-associated invariant chain is composed of at least four polypeptides. One of these polypeptide chains is expressed as a membrane-bound subunit and has been designated CD74. The loading of peptide onto the class II MHC protein (MHC II) appears to be regulated by CD74, which associates with MHC II during its migration to the endosomal compartment, where class II binds peptide. CD74 is expressed by cells of both T lymphocyte and B lymphocyte lineages. In fact, CD74 is broadly expressed in normal B lymphocytes, regardless of their histocompatibility leukocyte antigen (HLA) phenotype, while a subset of peripheral T lymphocytes that are MHC II negative do not express CD74.

CHROMOSOMAL LOCATION

Genetic locus: CD74 (human) mapping to 5q32; Cd74 (mouse) mapping to 18 E1.

SOURCE

CD74 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CD74 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-5438 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CD74 (C-16) is recommended for detection of the extracellular domain of both forms of CD74 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CD74 siRNA (h): sc-35023, CD74 siRNA (m): sc-35024, CD74 shRNA Plasmid (h): sc-35023-SH, CD74 shRNA Plasmid (m): sc-35024-SH, CD74 shRNA (h) Lentiviral Particles: sc-35023-V and CD74 shRNA (m) Lentiviral Particles: sc-35024-V.

Molecular Weight of CD74 isoforms: 31-45 kDa.

Positive Controls: BJBAB whole cell lysate: sc-2207, NAMALWA cell lysate: sc-2234 or CD74 (m2): 293T Lysate: sc-119118.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

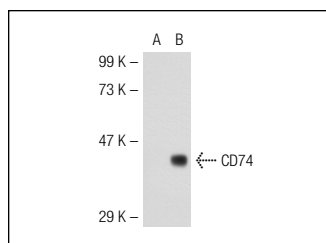
PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

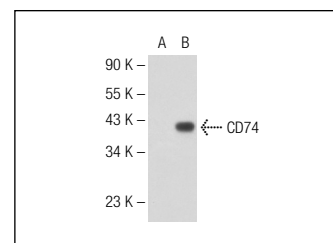
RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



CD74 (C-16): sc-5438. Western blot analysis of CD74 expression in non-transfected: sc-117752 (A) and mouse CD74 transfected: sc-119118 (B) 293T whole cell lysates.



CD74 (C-16): sc-5438. Western blot analysis of CD74 expression in non-transfected: sc-117752 (A) and mouse CD74 transfected: sc-110284 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Arudchelvan, Y., et al. 2003. Identification and characterization of major histocompatibility complex class II compartments in cortical thymic epithelial cells. *Anat. Rec. A Discov. Mol. Cell. Evol. Biol.* 274: 798-806.
- Binsky, I., et al. 2007. IL-8 secreted in a macrophage migration-inhibitory factor- and CD74-dependent manner regulates B cell chronic lymphocytic leukemia survival. *Proc. Natl. Acad. Sci. USA* 104: 13408-13413.
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Try **CD74 (LN-2): sc-6262** or **CD74 (PIN.1): sc-47742**, our highly recommended monoclonal alternatives to CD74 (C-16). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **CD74 (LN-2): sc-6262**.