

PRODUCT DATA SHEET

Bioworld Technology,Inc.

CD74 polyclonal antibody

Catalog: BS60907 Host: Rabbit Reactivity: Human

BackGround:

CD74, which is also known as the MHC Class II-associated invariant chain (Ii), is a type II transmembrane glycoprotein that plays a critical role in the antigen presentation process as a chaperone of MHC Class II proteins. It is expressed at high levels on B cells and to a lesser extent on numerous antigen presenting cell (APC) types including dendritic cells, Langerhans cells, monocytes, and macrophages as well as non-traditional APCs such as epithelial cells. CD74 was initially identified for its ability to regulate the folding and intracellular trafficking of newly synthesized MHC Class II molecules. Following expression, CD74 self-assembles as a trimer that serves as a scaffold for the assembly of MHC Class II molecules. Through this interaction, CD74 blocks the peptide binding cleft of MHC Class II molecules and prevents their premature association with endogenous polypeptides. Binding to CD74 also facilitates the translocation of MHC Class II molecules from the endoplasmic reticulum to the endocytic compartments during antigen presentation. In addition to its role as an MHC Class II chaperone, CD74 is also the receptor for macrophage migration-inhibitory factor (MIF). Binding to CD74 and its co-receptor, CD44, has been shown to induce the activation of the NFkB and ERK pathways to promote cell proliferation and survival signals. Recent studies have identified CXCR2 and CXCR4 as co-receptors for CD74 where MIF binding to CD74 complexes contributes to MIF-mediated monocyte chemotaxis and the induction of Akt signaling, respectively. Increased CD74 surface expression has been reported under inflammatory conditions and in certain types of cancer cells implying a potential role in tumorigenesis.

Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2.

Molecular Weight:

~ 40kDa

Swiss-Prot:

P04233

Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

Applications:

WB: 1:500~1:1000

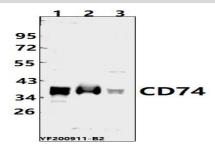
Storage&Stability:

Store at $4\,\mathrm{C}$ short term. Aliquot and store at -20 C long term. Avoid freeze-thaw cycles.

Specificity:

CD74 polyclonal antibody detects endogenous levels of CD74 protein.

DATA:



Western blot (WB) analysis of CD74 polyclonal antibody at 1:500 dilu-

Lane1:THP-1 whole cell lysate(40ug)

Lane2:HUT78 whole cell lysate(40ug)

Lane3:A549 whole cell lysate(40ug)

Note:

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

Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park,

MN 55416,USA.

Email: <u>info@bioworlde.com</u>

Tel: 6123263284 Fax: 6122933841

Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046,

P. R. China.

Email: <u>info@biogot.com</u>
Tel: 0086-025-68037686
Fax: 0086-025-68035151



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Tel: 6123263284 Fax: 6122933841 Bioworld technology, co. Ltd.

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