

CD74 (OX6): sc-53062

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 (mouse) mapping to 18 E1.

SOURCE

CD74 (OX6) is a mouse monoclonal antibody raised against thymocyte membrane glycoproteins of rat origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD74 (OX6) is available conjugated to either phycoerythrin (sc-53062 PE) or fluorescein (sc-53062 FITC), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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

APPLICATIONS

CD74 (OX6) is recommended for detection of CD74 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

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

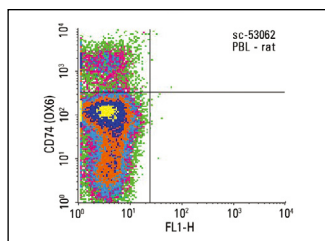
Molecular Weight of CD74 isoforms: 31-45 kDa.

Positive Controls: J774.A1 cell lysate: sc-3802, IB4 whole cell lysate: sc-364780 or RAW 264.7 whole cell lysate: sc-2211.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 3) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistochemount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



CD74 (OX6): sc-53062. Indirect FCM analysis of rat peripheral blood leukocytes stained CD74 (OX6), followed by PE-conjugated goat anti-mouse IgG: sc-3738. Quadrant markers were set based on the isotype control, normal mouse IgG₁: sc-3877.

SELECT PRODUCT CITATIONS

- Kupfer, R., et al. 2007. Loss of a gimap/ian gene leads to activation of NFκB through a MAPK-dependent pathway. *Mol. Immunol.* 44: 479-487.
- Lechpammer, M., et al. 2008. Minocycline treatment following hypoxic/ischaemic injury attenuates white matter injury in a rodent model of periventricular leucomalacia. *Neuropathol. Appl. Neurobiol.* 34: 379-393.
- Pletneva, M., et al. 2009. IFN-producing killer dendritic cells are antigen-presenting cells endowed with T-cell cross-priming capacity. *Cancer Res.* 69: 6607-6614.
- Galan-Rodriguez, B., et al. 2009. Oleoylethanolamide exerts partial and dose-dependent neuroprotection of substantia nigra dopamine neurons. *Neuropharmacology* 56: 653-664.
- Jenrow, K.A., et al. 2013. Selective inhibition of microglia-mediated neuroinflammation mitigates radiation-induced cognitive impairment. *Radiat. Res.* 179: 549-556.
- Vaughn, C.N., et al. 2013. Cellular neuroinflammation in a lateral forceps compression model of spinal cord injury. *Anat. Rec.* 296: 1229-1246.

CONJUGATES

See **CD74 (LN-2): sc-6262** for CD74 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.