

CD94 (18D3): sc-53016

BACKGROUND

The activity of natural killer (NK) cells is regulated by members of multiple receptor families that recognize class I MHC molecules, such as the killer cell inhibitory receptor/leukocyte immunoglobulin-like receptor (KIR/LIR) family and the C-type lectin superfamily. The KIR/LIR family includes p91A (also designated pp130 or PIR-B, for paired immunoglobulin-like receptor B) and p91B (also designated PIR-A). p91A acts as an inhibitory receptor through interactions with SHP-1, whereas p91B acts as an activating receptor. CD94, NKG2 and Ly-49 are members of the C-type lectin superfamily of type II membrane glycoproteins. CD94 forms heterodimers with NKG2 isoforms on the surface of NK cells, whereas Ly-49 isoforms form homodimers. NKG2-D, expressed on NK cells, $\gamma\delta$ T cells and CD8⁺ $\alpha\beta$ T cells, is a receptor for the stress inducible protein MICA, an antigen frequently expressed in epithelial tumors.

REFERENCES

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- Vance, R.E., Jamieson, A.M. and Raulet, D.H. 2000. Recognition of the class Ib molecule Qa-1^b by putative activating receptors CD94/NKG2C and CD94/NKG2E on mouse natural killer cells. *J. Exp. Med.* 190: 1801-1812.

CHROMOSOMAL LOCATION

Genetic locus: Klr1 (mouse) mapping to 6 F3.

SOURCE

CD94 (18D3) is a rat monoclonal antibody raised against B6 allele of CD94 of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD94 (18D3) is available conjugated to either phycoerythrin (sc-53016 PE) or fluorescein (sc-53016 FITC), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM.

APPLICATIONS

CD94 (18D3) is recommended for detection of CD94 of mouse origin by flow cytometry (1 μ g per 1 x 10⁶ cells).

Suitable for use as control antibody for CD94 siRNA (m): sc-42934, CD94 shRNA Plasmid (m): sc-42934-SH and CD94 shRNA (m) Lentiviral Particles: sc-42934-V.

Molecular Weight of CD94: 30 kDa.

SELECT PRODUCT CITATIONS

- Zhang, S., Wang, Q., Li, D., Huang, B., Hou, X. and Wang, D. 2019. MicroRNA-509 targets PAX6 to inhibit cell proliferation and invasion in papillary thyroid carcinoma. *Mol. Med. Rep.* 19: 1403-1409.
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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.