

DESCRIPTION

Species Reactivity	Human/Mouse/Canine
Specificity	Detects recombinant human CD94 in direct ELISAs and human, mouse, and canine CD94 in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human CD94 Lys32-Ile179 Accession # Q13241
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

CD94 (also NK cell receptor, KLRD1 and KP43) is a 27-31 kDa glycoprotein member of the C-type lectin superfamily. It is expressed on NK cells, particularly those that are CD56^{bright}, plus those that are CD56^{dim} but secrete material amounts of IFN-γ. CD94 forms covalent transmembrane (TM) heterodimers with NKG2A, B, C, E and H, and binds HLA-E (in human; Qa-1b in mouse) as part of a cellular homeostatic monitoring system. Amide-linkage based complexes with NKG2A are predicted to run at 70-80 kDa in SDS-PAGE. Depending upon the exact NKG2 partner, CD94 ligation can result in either NK cell activation (2C, 2H or 2E) or inhibition (2A or 2B). Human CD94 is a 179 amino acid (aa) type II TM protein. It possesses a short cytoplasmic segment (aa 1-10) plus a 158 aa extracellular region (aa 32-179) that contains one C-type lectin domain (aa 61-176). Multiple splice variants exist. One is a 149 aa, 19 kDa cytosolic protein that shows an Ala substitution for aa 3-34, while a second is a truncated, 104 aa, 17 kDa TM protein. A third isoform is 158 aa in length and 25 kDa in size, and shows a deletion of aa 34-54. Over aa 32-179, human CD94 shares 53% aa identity with mouse CD94.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.