

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 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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.

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