

DESCRIPTION

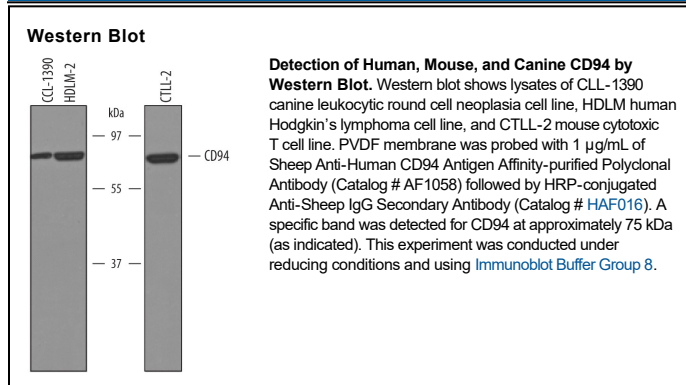
| | |
|---------------------------|---|
| Species Reactivity | Human/Mouse/Canine |
| Specificity | Detects recombinant human CD94 in direct ELISAs and human, mouse, and canine CD94 in Western blots. |
| Source | Polyclonal Sheep IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | Chinese hamster ovary cell line CHO-derived recombinant human CD94 Lys32-Ile179 Accession # Q13241 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS. |

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.

| | Recommended Concentration | Sample |
|---------------------|---------------------------|-----------|
| Western Blot | 1 µg/mL | See Below |

DATA



PREPARATION AND STORAGE

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|--------------------------------|--|
| Reconstitution | Sterile PBS to a final concentration of 0.2 mg/mL. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

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.