

**CD94 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1526a****Specification****CD94 Antibody - Product Information**

Application	WB, FC, E
Primary Accession	<a href="#">Q13241</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	21kDa KDa

**Description**

Natural killer (NK) cells are a distinct lineage of lymphocytes that mediate cytotoxic activity and secrete cytokines upon immune stimulation. Several genes of the C-type lectin superfamily, including members of the NKG2 family, are expressed by NK cells and may be involved in the regulation of NK cell function. KLRD1 (CD94) is an antigen preferentially expressed on NK cells and is classified as a type II membrane protein because it has an external C terminus. Plays a role as a receptor for the recognition of MHC class I HLA-E molecules by NK cells and some cytotoxic T-cells. Tissue specificity: Natural killer cells.

**Immunogen**

Purified recombinant fragment of human CD94 expressed in E. Coli.

**Formulation**

Ascitic fluid containing 0.03% sodium azide.

**CD94 Antibody - Additional Information**

**Gene ID** 3824

**Other Names**

Natural killer cells antigen CD94, KP43, Killer cell lectin-like receptor subfamily D member 1, NK cell receptor, CD94, KLRD1, CD94

**Dilution**

WB~~1/500 - 1/2000  
FC~~1/200 - 1/400  
E~~1/10000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

CD94 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## CD94 Antibody - Protein Information

**Name** KLRD1

**Synonyms** CD94

### Function

Immune receptor involved in self-nonself discrimination. In complex with KLRC1 or KLRC2 on cytotoxic and regulatory lymphocyte subsets, recognizes non-classical major histocompatibility (MHC) class Ib molecule HLA-E loaded with self-peptides derived from the signal sequence of classical MHC class Ia and non-classical MHC class Ib molecules (PubMed:<a href="http://www.uniprot.org/citations/10023772" target="\_blank">10023772</a>, PubMed:<a href="http://www.uniprot.org/citations/18064301" target="\_blank">18064301</a>, PubMed:<a href="http://www.uniprot.org/citations/18083576" target="\_blank">18083576</a>, PubMed:<a href="http://www.uniprot.org/citations/37264229" target="\_blank">37264229</a>, PubMed:<a href="http://www.uniprot.org/citations/9486650" target="\_blank">9486650</a>, PubMed:<a href="http://www.uniprot.org/citations/9754572" target="\_blank">9754572</a>). Enables cytotoxic cells to monitor the expression of MHC class I molecules in healthy cells and to tolerate self (PubMed:<a href="http://www.uniprot.org/citations/12387742" target="\_blank">12387742</a>, PubMed:<a href="http://www.uniprot.org/citations/18064301" target="\_blank">18064301</a>, PubMed:<a href="http://www.uniprot.org/citations/9430220" target="\_blank">9430220</a>). Primarily functions as a ligand binding subunit as it lacks the capacity to signal.

### Cellular Location

Cell membrane; Single-pass type II membrane protein

### Tissue Location

Expressed in NK cell subsets (at protein level) (PubMed:21825173, PubMed:9430220, PubMed:9485206). Expressed in memory/effector CD8-positive alpha-beta T cell subsets (at protein level) (PubMed:12387742, PubMed:20952657). Expressed in melanoma- specific cytotoxic T cell clones (at protein level) (PubMed:9485206) Expressed in terminally differentiated cytotoxic gamma-delta T cells (at protein level) (PubMed:20952657). KLRD1-KLRC1 and KLRD1-KLRC2 are differentially expressed in NK and T cell populations, with only minor subsets expressing both receptor complexes (at protein level) (PubMed:20952657).

## CD94 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

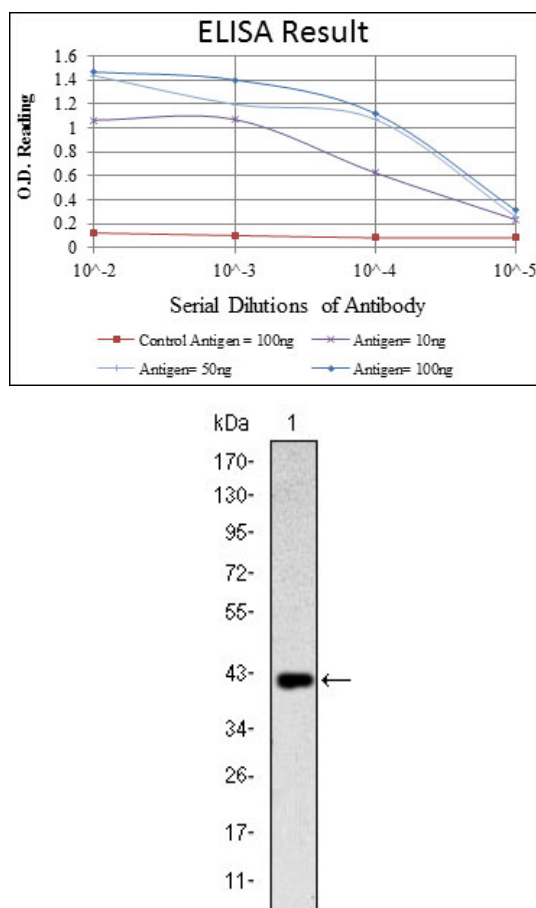


Figure 1: Western blot analysis using CD94 mAb against human CD94 (AA: 32-179) recombinant protein. (Expected MW is 42.6 kDa)

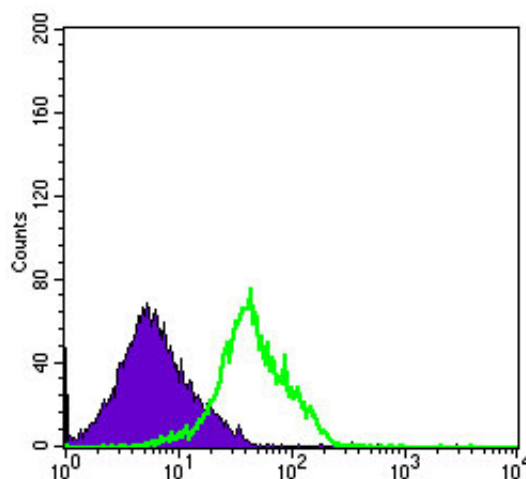


Figure 2: Flow cytometric analysis of RAJI cells using CD94 mouse mAb (green) and negative control (purple).

## CD94 Antibody - References

1. Leukemia. 2008 Sep;22(9):1778-81.
2. Traffic. 2008 Jun;9(6):1019-34.