

Product Name: CD314 Mouse Monoclonal Antibody**Catalog #: AMM82481**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,ELISA,FC
Reactivity	Human, Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG2a
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in PBS with 0.05% sodium azide
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:2000,ELISA 1:5000-1:20000,FC 1:200-1:400
Molecular Weight	25.3kDa

Antigen Information

Gene Name	CD314
Alternative Names	KLRK1; KLR; NKG2D; NKG2-D; D12S2489E
Gene ID	22914.0
SwissProt ID	P26718
Immunogen	Purified recombinant fragment of human CD314 (AA: extra 73-216) expressed in E. Coli.

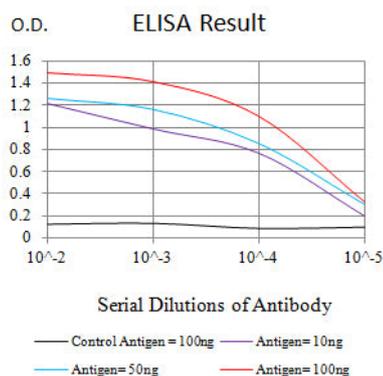
Background

Natural killer (NK) cells are lymphocytes that can mediate lysis of certain tumor cells and virus-infected cells without previous activation. They can also regulate specific humoral and cell-mediated immunity. NK cells preferentially express several calcium-dependent (C-type) lectins, which have been implicated in the regulation of NK cell function. The NKG2 gene family is located

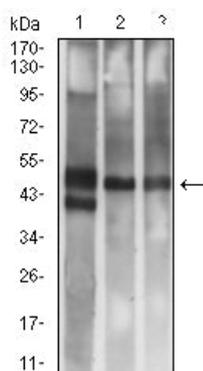
within the NK complex, a region that contains several C-type lectin genes preferentially expressed in NK cells. This gene encodes a member of the NKG2 family. The encoded transmembrane protein is characterized by a type II membrane orientation (has an extracellular C terminus) and the presence of a C-type lectin domain. It binds to a diverse family of ligands that include MHC class I chain-related A and B proteins and UL-16 binding proteins, where ligand-receptor interactions can result in the activation of NK and T cells. The surface expression of these ligands is important for the recognition of stressed cells by the immune system, and thus this protein and its ligands are therapeutic targets for the treatment of immune diseases and cancers. Read-through transcription exists between this gene and the upstream KLRC4 (killer cell lectin-like receptor subfamily C, member 4) family member in the same cluster.

Research Area

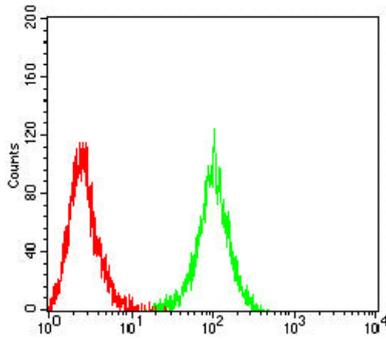
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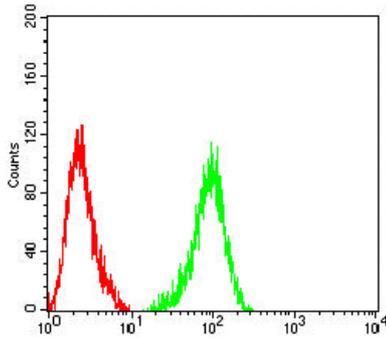
Black line: Control Antigen (100 ng); Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)



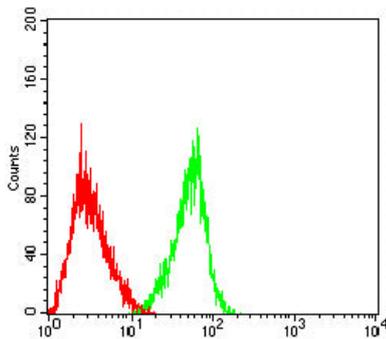
Western blot analysis using CD314 mouse mAb against Rat Spleen (1), A549 (2), and HepG2 (3) cell lysate.



Flow cytometric analysis of Jurkat cells using CD314 mouse mAb (green) and negative control (red).



Flow cytometric analysis of THP-1 cells using CD314 mouse mAb (green) and negative control (red).



Flow cytometric analysis of U937 cells using CD314 mouse mAb (green) and negative control (red).