Recombinant Mouse Klrc1 protein, Fc-tagged

Cat. No. Klrc1-221M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse Klrc1(Ala94-IIe22) fused with N-terminus Mouse IgG2A was expressed in HEK293.
Species	Mouse
Source	HEK293
ProteinLength	94-22 a.a.
Description	NKG2B is a member of the C-type lectin superfamily of proteins. It is a splice variant of NKG2A which has an additional 17 aa in the extracellular juxtamembrane region. NKG2B is an approximately 40 kDa transmembrane protein, with 28 aa in the transmembrane region, and 105 aa in the extracellular domain (ECD). Within the ECD, mouse NKG2B shares 40% and 67% aa identity with human and rat NKG2B, respectively. NKG2B is expressed on a subset of NK cells and CD8+ T cells where it forms a covalent heterodimer with CD94. NKG2A-CD94 heterodimers bind to the widely expressed nonclassical MHC-I molecule, HLA-E (Qa-1b in mouse), which presents a peptide derived from the signal peptide of classical MHC-I molecules. Triggering the NKG2A-CD94 complex inhibits the cytolytic activity of NK and CD8+ T cells. This enables the innate immune system to detect cells that express host MHC-I molecules and to protect them from NK cell mediated lysis. This mechanism is subverted by human cytomegalovirus which encodes a peptide that is homologous to the HLA-E binding peptide. HCMV infected cells up-regulate both HLA-E and NKG2A expression and utilize this peptide to escape from immune clearance. In contrast,

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	vaccinia virus induces HLA-E down-regulation, thus permitting NK cell lysis of the virally infected cell.
Predicted N Terminal	Met
Form	Lyophilized from a 0.2 μm filtered solution in PBS.
Molecular Mass	Predicted Molecular Mass: 42 kDa SDS-PAGE: 57-65 kDa, reducing conditions
Endotoxin	<0.1 EU per 1 μg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
Reconstitution	Reconstitute at 500 μg/mL in PBS.

GENE INFORMATION

Gene Name	KLRC1 killer cell lectin-like receptor subfamily C, member 1 [Homo sapiens]
Official Symbol	Klrc1
Synonyms	KLRC1; killer cell lectin-like receptor subfamily C, member 1; NKG2; NKG2-A/NKG2-B type II integral membrane protein; CD159a; NKG2 1/B activating NK receptor; NKG2 A; NKG2 B; NK cell receptor A; C-lectin type II protein; natural killer cell lectin;

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	natural killer group protein 2; NKG2-1/B activating NK receptor; NKG2-A/B-activating NK receptor; CD159 antigen-like family member A; NKG2-A/B type II integral membrane protein; NKG2A; CD159A; MGC13374; MGC59791;
Gene ID	3821
mRNA Refseq	NM_002259
Protein Refseq	NP_002250
MIM	161555
UniProt ID	P26715

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