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KLRC2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8630a

Product Information

Application	WB, FC, IHC-P, E
Primary Accession	P26717
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21886
Calculated MW	26159
Antigen Region	1-30

Additional Information

Gene ID	3822
Other Names	NKG2-C type II integral membrane protein, CD159 antigen-like family member C, NK cell receptor C, NKG2-C-activating NK receptor, CD159c, KLRC2, NKG2C
Target/Specificity	This KLRC2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human KLRC2.
Dilution	WB~~1:1000 FC~~1:10~50 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	KLRC2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KLRC2
Synonyms	NKG2C {ECO:0000303|PubMed:18083576}

Function	Immune activating receptor involved in self-nonself discrimination. In complex with KLRD1 on cytotoxic lymphocyte subsets, recognizes non-classical major histocompatibility (MHC) class Ib HLA-E loaded with signal sequence-derived peptides from non-classical MHC class Ib HLA-G molecules, likely playing a role in the generation and effector functions of adaptive natural killer (NK) cells and in maternal-fetal tolerance during pregnancy (PubMed:30134159, PubMed:37264229, PubMed:9754572). Regulates the effector functions of terminally differentiated cytotoxic lymphocyte subsets, and in particular may play a role in adaptive NK cell response to viral infection (PubMed:20952657, PubMed:21825173). Upon HLA-E-peptide binding, transmits intracellular signals via the adapter protein TYROBP/DAP12, triggering the phosphorylation of proximal signaling molecules and cell activation (PubMed:15940674, PubMed:9655483).
Cellular Location	Cell membrane; Single-pass type II membrane protein
Tissue Location	Expressed in NK cell subsets, in particular in adaptive CD57-positive NK cells (at protein level) (PubMed:20952657, PubMed:21825173). Expressed in terminally differentiated cytotoxic gamma-delta T cells (at protein level) (PubMed:20952657). Expressed in alpha-beta T cells subsets (at protein level) (PubMed:20952657). KLRD1- KLRC1 and KLRD1-KLRC2 are differentially expressed within NK and T cell populations, with only minor subsets expressing both receptor complexes (at protein level) (PubMed:20952657).

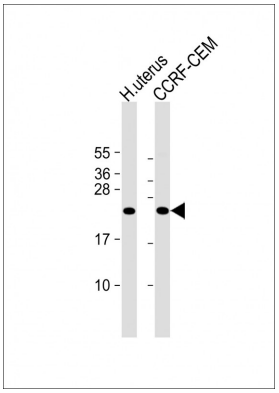
Background

KLRC2 plays a role as a receptor for the recognition of MHC class I HLA-E molecules by NK cells and some cytotoxic T-cells.

References

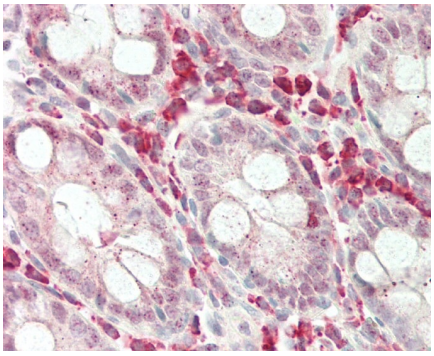
Seo,J., et.al., Tissue Antigens 70 (4), 307-313 (2007)
Park,K.S., et.al., Tissue Antigens 72 (4), 342-346 (2008)

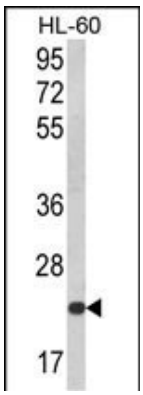
Images



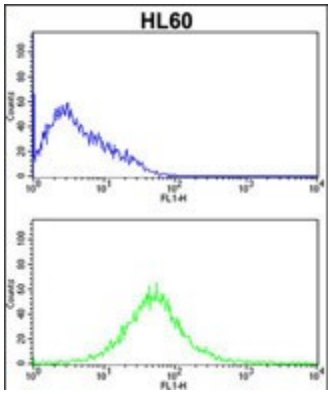
All lanes : Anti-KLRC2 Antibody (N-term) at 1:2000 dilution Lane 1: human uterus lysate Lane 2: CCRF-CEM whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 26 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Formalin-fixed and paraffin-embedded H.colon tissue reacted with KLRC2 Antibody (N-term) (Cat#AP8630a).

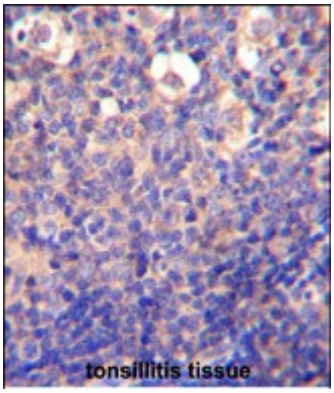




Western blot analysis of KLRC2 Antibody (N-term) (Cat. #AP8630a) in HL-60 cell line lysates (35ug/lane). KLRC2 (arrow) was detected using the purified Pab.



KLRC2 Antibody (N-term) (Cat. #AP8630a) flow cytometric analysis of HL60 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



KLRC2 Antibody (N-term) (Cat. #AP8630a) immunohistochemistry analysis in formalin fixed and paraffin embedded human tonsillitis tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of the KLRC2 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.