

CD160 Polyclonal Antibody

Rabbit Anti Human Polyclonal Antibody

Catalog # ABV11718

Product Information

Application	WB
Primary Accession	O95971
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	19810

Additional Information

Gene ID	11126
Positive Control	WB
Application & Usage	WB: 1:1001
Other Names	CD160 antigen, Natural killer cell receptor BY55, CD160, CD160, BY55
Target/Specificity	CD160
Antibody Form	Liquid
Appearance	Colorless liquid
Formulation	PBS with 0.09% (W/V) sodium azide.
Handling	The antibody solution should be gently mixed before use.
Reconstitution & Storage	-20 °C
Background Descriptions	
Precautions	CD160 Polyclonal Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CD160 {ECO:0000303 PubMed:16809620, ECO:0000312 HGNC:HGNC:17013}
Function	[CD160 antigen]: Receptor on immune cells capable to deliver stimulatory or inhibitory signals that regulate cell activation and differentiation. Exists as a GPI-anchored and as a transmembrane form, each likely initiating distinct signaling pathways via phosphoinositol 3-kinase in activated NK cells and via

LCK and CD247/CD3 zeta chain in activated T cells (PubMed:[11978774](#), PubMed:[17307798](#), PubMed:[19109136](#)). Receptor for both classical and non-classical MHC class I molecules (PubMed:[12486241](#), PubMed:[9973372](#)). In the context of acute viral infection, recognizes HLA-C and triggers NK cell cytotoxic activity, likely playing a role in anti-viral innate immune response (PubMed:[12486241](#)). On CD8+ T cells, binds HLA-A2-B2M in complex with a viral peptide and provides a costimulatory signal to activated/memory T cells (PubMed:[9973372](#)). Upon persistent antigen stimulation, such as occurs during chronic viral infection, may progressively inhibit TCR signaling in memory CD8+ T cells, contributing to T cell exhaustion (PubMed:[25255144](#)). On endothelial cells, recognizes HLA-G and controls angiogenesis in immune privileged sites (PubMed:[16809620](#)). Receptor or ligand for TNF superfamily member TNFRSF14, participating in bidirectional cell-cell contact signaling between antigen presenting cells and lymphocytes. Upon ligation of TNFRSF14, provides stimulatory signal to NK cells enhancing IFNG production and anti-tumor immune response (By similarity). On activated CD4+ T cells, interacts with TNFRSF14 and down-regulates CD28 costimulatory signaling, restricting memory and alloantigen-specific immune response (PubMed:[18193050](#)). In the context of bacterial infection, acts as a ligand for TNFRSF14 on epithelial cells, triggering the production of antimicrobial proteins and pro-inflammatory cytokines (By similarity).

Cellular Location

[CD160 antigen]: Cell membrane; Lipid-anchor, GPI-anchor

Tissue Location

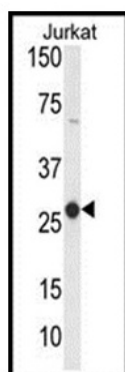
Expression is restricted to functional NK and cytotoxic T lymphocytes. Expressed in viral-specific effector memory and terminally differentiated effector memory CD8+ T cells. Expressed in memory and activated CD4+ T cell subsets (at protein level) (PubMed:[11978774](#), PubMed:[18193050](#), PubMed:[25255144](#), PubMed:[9743336](#)) Expressed at high levels in intraepithelial lymphocytes (at protein level) (PubMed:[9743336](#)). Expressed in both alpha-beta and gamma-delta CD8+ T cell subsets (at protein level) (PubMed:[11978774](#), PubMed:[18193050](#), PubMed:[9743336](#)). Expressed in umbilical vein endothelial cells (at protein level) (PubMed:[16809620](#)). Expressed in monocytes and at lower levels in B cells (PubMed:[23761635](#)). Isoform 3: Expressed exclusively in activated NK cells (at protein level) (PubMed:[19109136](#)).

Background

CD160 is a 27 kDa glycoprotein which was initially identified with the monoclonal antibody BY55. Its expression is tightly associated with peripheral blood NK cells and CD8 T lymphocytes with cytolytic effector activity. The cDNA sequence of CD160 predicts a cysteine-rich, glycosylphosphatidylinositol-anchored protein of 181 amino acids with a single Ig-like domain weakly homologous to KIR2DL4 molecule. CD160 is expressed at the cell surface as a tightly disulfide-linked multimer. RNA blot analysis revealed CD160 mRNAs of 1.5 and 1.6 kb whose expression was highly restricted to circulating NK and T cells, spleen and small intestine. Within NK cells CD160 is expressed by CD56dimCD16+ cells whereas among circulating T cells its expression is mainly restricted to TCRgd bearing cells and to TCRab+CD8brightCD95+ CD56+CD28-CD27-cells. In tissues, CD160 is expressed on all intestinal intraepithelial lymphocytes. CD160 shows a broad specificity for binding to both classical and nonclassical MHC class I molecules.

Images

Western blot analysis of CD160 antibody in Jurkat cell line lysate.



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