

# Anti-CD160 Antibody

Rabbit polyclonal antibody to CD160 Catalog # AP61322

## **Product Information**

Application	WB, IF/IC
Primary Accession	<u>095971</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	19810

#### **Additional Information**

Gene ID	11126
Other Names	BY55; CD160 antigen; Natural killer cell receptor BY55; CD160
Target/Specificity	Recognizes endogenous levels of CD160 protein.
Dilution	WB~~WB (1/500 - 1/1000), IF/IC (1/100 - 1/500) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

## **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: <u>11978774</u> , PubMed: <u>17307798</u> , PubMed: <u>19109136</u> ). Receptor for both classical and non-classical MHC class I molecules (PubMed: <u>12486241</u> , PubMed: <u>9973372</u> ). 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: <u>12486241</u> ). 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: <u>9973372</u> ). 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: <u>25255144</u> ). On endothelial cells, recognizes HLA-G and controls angiogenesis in immune

	privileged sites (PubMed: <u>16809620</u> ). 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: <u>18193050</u> ). 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

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CD160. The exact sequence is proprietary.

#### Images



Western blot analysis of CD160 expression in RAW264.7 (A), K562 (B), Jurkat (C), Myla2059 (D) whole cell lysates.



Immunofluorescent analysis of CD160 staining in NIH3T3 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a Alexa Fluor 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.