

Anti-CD160 Antibody

Rabbit polyclonal antibody to CD160 Catalog # AP61322

Specification

Anti-CD160 Antibody - Product Information

Application WB, IF/IC
Primary Accession O95971
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 19810

Anti-CD160 Antibody - 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

Anti-CD160 Antibody - 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 activated T cells (PubMed:https://doi.org/10.1016/j.ccm/

 $href="http://www.uniprot.org/citations/11978774" target="_blank">11978774, PubMed:17307798, PubMed:19109136). Receptor for both classical and non-classical MHC class I molecules (PubMed:19109136).$

href="http://www.uniprot.org/citations/12486241" target="_blank">12486241, PubMed:<a



href="http://www.uniprot.org/citations/9973372" target="_blank">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:23761635). Isoform 3: Expressed exclusively in activated NK cells (at protein level) (PubMed:19109136).

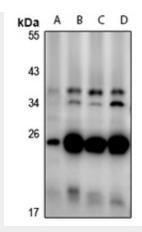
Anti-CD160 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

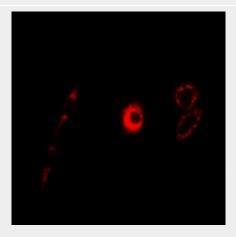
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-CD160 Antibody - 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 $^{\circ}$ 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.

Anti-CD160 Antibody - Background

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