

CD160 Polyclonal Antibody

Catalog # AP68912

Product Information

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

Additional Information

Gene ID	11126
Other Names	CD160; BY55; CD160 antigen; Natural killer cell receptor BY55; CD antigen CD160
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications. IF~~1:50~200
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

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

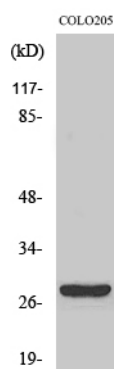
Expression is restricted to functional NK and cytotoxic T lymphocytes. Expressed in viral-specific effector memory and terminally differentiated effector memory CD8+ T cells. Expressed in memory and activated CD4+ T cell subsets (at protein level) (PubMed:11978774, PubMed:18193050, PubMed:25255144, PubMed:9743336) 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 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:[19109136](#), PubMed:[11978774](#), PubMed:[17307798](#)). Receptor for both classical and non-classical MHC class I molecules (PubMed:[9973372](#), PubMed:[12486241](#)). 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 downregulates 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 proinflammatory cytokines (By similarity).

Images

Western Blot analysis of various cells using CD160
Polyclonal Antibody



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