

CD160
Catalog # PVGS1600**Specification**

CD160 - Product Information

Primary Accession [O95971](#)
Species
Human

Sequence
Ile27-Ser159

Purity
> 95% as analyzed by SDS-PAGE

Endotoxin Level
< 1 EU/ µg of protein by gel clotting method

Biological Activity
Immobilized CD160, hFc, Human at 1.0 µg/ml (100 µl/well) can bind HVEM-Fc, Human-Biotin with a linear range of 0.617-50.0 µg/ml when detected by SA-HRP.

Expression System
HEK 293

Formulation **Lyophilized from a 0.2 µm filtered solution in PBS.**

Reconstitution
It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH₂O or PBS up to 100 µg/ml.

Storage & Stability
Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

CD160 - Additional Information

Gene ID 11126

Other Names
CD160 antigen, Natural killer cell receptor BY55, CD160, CD160 antigen, soluble form, CD160 {ECO:0000303|PubMed:16809620, ECO:0000312|HGNC:HGNC:17013}

Target Background
CD160 is a glycosylphosphatidylinositol-anchored Ig domain protein that is expressed on almost all intestinal intraepithelial lymphocytes (IELs), γδ T (gamma delta T) cells, NK (natural killer) cells, and a minor subset of CD4+ and CD8+ T cells. In terms of function, work has centered on the role

of CD160 in enhancing NK or CD8 T cell activation. Such effects have been attributed to the ability of CD160 to bind classical and nonclassical MHC class I molecules, although with apparent low affinity, requiring clustering of MHC class I molecules or overexpression of CD160 or MHC class I for detection of the interaction.

CD160 - 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).

CD160 - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CD160 - Images