

**CD160 Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP9869c****Specification**

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**CD160 Antibody (Center) Blocking Peptide - Product Information**Primary Accession [O95971](#)**CD160 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 11126**Other Names**

CD160 antigen, Natural killer cell receptor BY55, CD160, CD160, BY55

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**CD160 Antibody (Center) Blocking Peptide - 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:<a href="http://www.uniprot.org/citations/19109136" target="\_blank">19109136</a>, PubMed:<a href="http://www.uniprot.org/citations/11978774" target="\_blank">11978774</a>, PubMed:<a href="http://www.uniprot.org/citations/17307798" target="\_blank">17307798</a>). Receptor for both classical and non-classical MHC class I molecules (PubMed:<a href="http://www.uniprot.org/citations/9973372" target="\_blank">9973372</a>, PubMed:<a href="http://www.uniprot.org/citations/12486241" target="\_blank">12486241</a>). 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:<a href="http://www.uniprot.org/citations/12486241" target="\_blank">12486241</a>). 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:<a href="http://www.uniprot.org/citations/9973372" target="\_blank">9973372</a>). 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:<a href="http://www.uniprot.org/citations/25255144" target="\_blank">25255144</a>).

target="\_blank">25255144</a>). On endothelial cells, recognizes HLA-G and controls angiogenesis in immune privileged sites (PubMed:<a href="http://www.uniprot.org/citations/16809620" target="\_blank">16809620</a>). 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:<a href="http://www.uniprot.org/citations/18193050" target="\_blank">18193050</a>). 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:9743336, PubMed:18193050, PubMed:11978774, PubMed:25255144) 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:9743336, PubMed:18193050, PubMed:11978774). 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 Antibody (Center) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

### **CD160 Antibody (Center) Blocking Peptide - Images**

### **CD160 Antibody (Center) Blocking Peptide - Background**

CD160 is an 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.

### **CD160 Antibody (Center) Blocking Peptide - References**

Schmitt, C., et al. Genes Immun. 10(7):616-623(2009) Kolz, M., et al. PLoS Genet. 5 (6), E1000504 (2009) Giustiniani, J., et al. J. Immunol. 182(1):63-71(2009) Cai, G., et al. Nat. Immunol. 9(2):176-185(2008)