

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CD160 in direct ELISAs. In direct ELISAs and Western blots, no cross-reactivity with recombinant mouse CD160 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 688327
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human CD160 Ile27-Ser159 Accession # O95971
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Flow Cytometry	0.25-1 µg/10 ⁶ cells	Human peripheral blood lymphocytes

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

CD160 (also BY55) is a 27 kDa member of the immunoglobulin superfamily of molecules. It is expressed on select hematopoietic cell types, including CD56^{dim} CD16⁺ cytotoxic NK cells, CD8⁺ CD28⁻ effector T cells, δ/γ T cells, and restricted CD4⁺ T cells. It is a receptor for HLA-C molecules, and its engagement induces CD160⁺ NK cells to both secrete IFN-γ plus TNF-α and initiate a cytotoxic program. Human CD160 was originally identified as a 155 amino acid (aa) proprotein (aa 27-181). It contains a 132 aa mature region (aa 27-159) and a C-terminal prosegment that is cleaved to create a GPI linkage. The mature region possesses one V-type Ig-like domain (aa 27-122). CD160 is found as a soluble, disulfide-linked 80 kDa multimer (likely trimer) that is generated by proteolysis of the GPI-linked form. This 80 kDa form, plus others, are highly resistant to reduction. There is also a 100-110 kDa multimeric transmembrane (TM) form that is associated with activated NK cells. It contains a 55 aa substitution for Gly180-Leu181, and shows a 20 aa TM segment between aa 163-182. The TM form appears to have a splice variant that lacks aa 25-133. Over aa 27-159, human CD160 shares 62% aa identity with mouse CD160.

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