

TECHNICAL DATA SHEET

CyFlow™ CD160 PE Anti-Hu; Clone BY55

REF CL791330

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD160
Alternative Names	BY55, NK1, NK28
Clone	BY55
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgM
Species Reactivity	Human
Negative Species Reactivity	—
Quantity	100 tests
Immunogen	Human NK cell line YT2C2

Specificity

The mouse monoclonal antibody BY55 recognizes CD160 antigen, a 27 kDa glycoprotein expressed on NK cells, NK-T cells, intestinal intraepithelial lymphocytes, TCR- γ/δ T cells and a small population of TCR- α/β T cells. The antibody detects both GPI-anchored and transmembrane form of CD160.

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Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 10 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing Tris buffered saline (TBS) solution, pH ≈8.0, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

CD160 is a cell surface glycoprotein of immunoglobulin superfamily, which functions as a costimulatory receptor expressed mainly on cytotoxic cell populations and recognizing both classical and non-classical MHC class I molecules. It can form disulfide-linked multimers. Down-modulation of CD160 occurs as a consequence of its proteolytic cleavage and the released soluble form was found to impair the MHC-class I specific cytotoxicity of CD8+ T lymphocytes and NK cells. In contrast to GPI-anchored isoform with broader expression among CD160 positive cells, expression of the transmembrane isoform is restricted to NK cells and is activation-dependent.

References

- Maïza H, Leca G, Mansur IG, Schiavon V, Boumsell L, Bensussan A: A novel 80-kD cell surface structure identifies human circulating lymphocytes with natural killer activity. J Exp Med. 1993 Sep 1; 178(3):1121-6. < PMID: 7688788 >
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- Anumanthan A, Bensussan A, Boumsell L, Christ AD, Blumberg RS, Voss SD, Patel AT, Robertson MJ, Nadler LM, Freeman GJ: Cloning of BY55, a novel Ig superfamily member expressed on NK cells, CTL, and intestinal intraepithelial lymphocytes. J Immunol. 1998 Sep 15; 161(6):2780-90. < PMID: 9743336 >
- Merino J, Ramírez N, Moreno C, Toledo E, Fernández M, Sánchez-Ibarrola A: BY55/CD160 cannot be considered a cytotoxic marker in cytomegalovirus-specific human CD8(+) T cells. Clin Exp Immunol. 2007 Jul; 149(1):87-96. < PMID: 17425655 >
- Giustiniani J, Bensussan A, Marie-Cardine A: Identification and characterization of a transmembrane isoform of CD160 (CD160-TM), a unique activating receptor selectively expressed upon human NK cell activation. J Immunol. 2009 Jan 1; 182(1):63-71. < PMID: 19109136 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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