

## TECHNICAL DATA SHEET

### CyFlow™ CD160 Purified Anti-Hu; Clone BY55

**REF** CT688691

**For Research Use Only.  
Not for use in diagnostic or therapeutic procedures.**

### Specifications

|                                    |                          |
|------------------------------------|--------------------------|
| <b>Antigen</b>                     | CD160                    |
| <b>Alternative Names</b>           | BY55, NK1, NK28          |
| <b>Clone</b>                       | BY55                     |
| <b>Clonality</b>                   | monoclonal               |
| <b>Format</b>                      | Purified                 |
| <b>Host / Isotype</b>              | Mouse / IgM              |
| <b>Species Reactivity</b>          | Human                    |
| <b>Negative Species Reactivity</b> | —                        |
| <b>Quantity [Concentration]</b>    | 0.1 mg [ 1 mg/ml ]       |
| <b>Immunogen</b>                   | 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- $\gamma/\delta$  T cells and a small population of TCR- $\alpha/\beta$  T cells. The antibody detects both GPI-anchored and transmembrane form of CD160.

#### Contact Information:

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## Application

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Immunoprecipitation

## Storage Buffer

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

## Storage and Stability

|                  |   |
|------------------|---|
| <b>Storage</b>   | Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze. |
| <b>Stability</b> | 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

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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,

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- 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 >

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The Safety Data Sheet for this product is available at [www.sysmex-partec.com/services](http://www.sysmex-partec.com/services).

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