

1P-750-T025

## Monoclonal Antibody to CD160 Phycoerythrin (PE) conjugated (25 tests)

Clone: BY55

**Isotype:** Mouse IgM

Specificity: The mouse monoclonal antibody BY55 recognizes CD160, 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.

Regulatory Status: RUO

Immunogen: Human NK cell line YT2C2

Species Reactivity: Human

**Preparation:** The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum

conditions. The conjugate is purified by size-exclusion chromatography and

adjusted for direct use. No reconstitution is necessary.

**Storage Buffer:** The reagent is provided in stabilizing Tris buffered saline (TBS) solution containing

15 mM sodium azide.

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

use after expiration date stamped on vial label.

**Usage:** The reagent is designed for Flow Cytometry analysis of human blood cells using

10 µl reagent / 100 µl of whole blood or 10° cells in a suspension.

The content of a vial (0.25 ml) is sufficient for 25 tests.

**Expiration:** See vial label

**Lot Number:** See vial label

Background: 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.



## PRODUCT DATA SHEET

## References:

\*Bensussan A, Gluckman E, el Marsafy S, Schiavon V, Mansur IG, Dausset J, Boumsell L, Carosella E: BY55 monoclonal antibody delineates within human cord blood and bone marrow lymphocytes distinct cell subsets mediating cytotoxic activity. Proc Natl Acad Sci U S A. 1994 Sep 13;91(19):9136-40.

\*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.

\*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.
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\*Merino J, Ramírez N, Moreno C, Toledo É, 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.

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