

## TECHNICAL DATA SHEET

### CyFlow™ CD38 PE-DyLight™ 594 Anti-Hu; Clone HIT2

**REF** BN321669

**For Research Use Only.**

**Not for use in diagnostic or therapeutic procedures.**

### Specifications

|                                    |                            |
|------------------------------------|----------------------------|
| <b>Antigen</b>                     | CD38                       |
| <b>Alternative Names</b>           | T10                        |
| <b>Clone</b>                       | HIT2                       |
| <b>Clonality</b>                   | monoclonal                 |
| <b>Format</b>                      | PE-DyLight™ 594            |
| <b>Host / Isotype</b>              | Mouse / IgG1               |
| <b>Species Reactivity</b>          | Human                      |
| <b>Negative Species Reactivity</b> | —                          |
| <b>Quantity</b>                    | 100 tests                  |
| <b>Immunogen</b>                   | Human thymocytes in foetus |

### Specificity

The mouse monoclonal antibody HIT2 recognizes CD38 antigen, a 45 kDa type II transmembrane glycoprotein strongly expressed mainly on plasma cells and activated T and B lymphocytes; it is an antigenic marker of lymphoid cells.

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## Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 4 µl reagent / 100 µl of whole blood or 10<sup>6</sup> cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

## Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈7.4, 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

CD38 (NAD<sup>+</sup> glycohydrolase) is a type II transmembrane glycoprotein able to induce activation, proliferation and differentiation of mature lymphocytes and mediate apoptosis of myeloid and lymphoid progenitor cells. Another role of CD38 is provided by enzymatic activity of its extracellular part. CD38 acts as NAD<sup>+</sup> glycohydrolase converting NAD<sup>+</sup> into ADP-ribose, as ADP-ribosyl cyclase producing cADPR and as cADPR hydrolase, thus affecting levels of calcium-mobilizing metabolites. ADPR produced by CD38 serves as an important second messenger of neutrophil and dendritic cell migration.

## References

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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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