

## 30-1242PE-Cy7: Anti-CD38 Monoclonal Antibody (Clone:HIT2) PE-Cy™ 7

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	HIT2
<b>Application :</b>	FACS
<b>Reactivity :</b>	Human
<b>Gene :</b>	CD38
<b>Gene ID :</b>	952
<b>Uniprot ID :</b>	P28907
<b>Format :</b>	Purified
<b>Alternative Name :</b>	CD38
<b>Isotype :</b>	Mouse IgG1
<b>Immunogen Information :</b>	Human thymocytes in foetus

### Description

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.

### Product Info

<b>Amount :</b>	100 tests
<b>Purification :</b>	Purified by protein-A affinity chromatography
<b>Content :</b>	In phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
<b>Storage condition :</b>	Store at 2-8°C. Do not freeze.

### Application Note

Flow cytometry: *The reagent is designed for analysis of human blood cells using 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.*

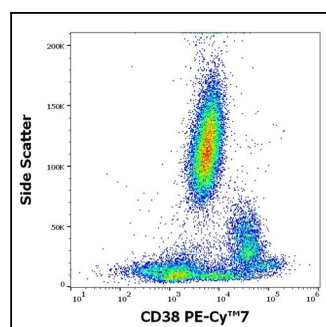


Figure 1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD38 (HIT2) PE-Cy™ 7 antibody (4 µl reagent / 100 µl of peripheral whole blood).

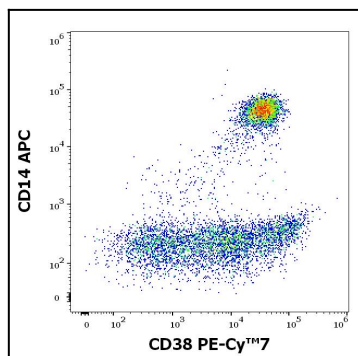


Figure 2: Flow cytometry multicolor surface staining pattern of human peripheral blood mononuclear cells stained using anti-human CD14 (MEM-15) APC antibody (10  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood) and anti-human CD38 (HIT2) PE-Cy<sup>™</sup> 7 antibody (4  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).

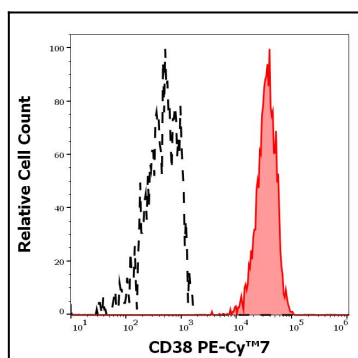


Figure 3: Separation of human monocytes (red-filled) from CD38 negative lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD38 (HIT2) PE-Cy<sup>™</sup> 7 antibody (4  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).