

## 30-1242AF700: Anti-CD38 Monoclonal Antibody (Clone:HIT2) Alexa Fluor® 700

|                                |                            |
|--------------------------------|----------------------------|
| <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>Storage condition :</b> | Store at 2-8°C. Do not freeze.                |

### Application Note

**Flow Cytometry Western Blotting** *Recommended dilution:* 2 µg/ml

*Positive control:* RAJI human cell line

*Sample preparation:* Resuspend approx. 50 mil. cells in 1 ml cold Lysis buffer (1% laurylmaltoside in 20 mM Tris/Cl, 100 mM NaCl pH 8.2, 50 mM NaF including Protease inhibitor Cocktail). Incubate 60 min on ice. Centrifuge to remove cell debris. Mix lysate with non-reducing SDS-PAGE sample buffer. Boil for 5 min.

**Immunohistochemistry** *Recommended dilution:* 10 µg/ml

**Immunohistochemistry (frozen sections)**

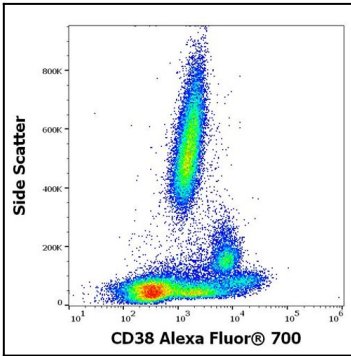


Figure 1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD38 (HIT2) Alexa Fluor® 700 antibody

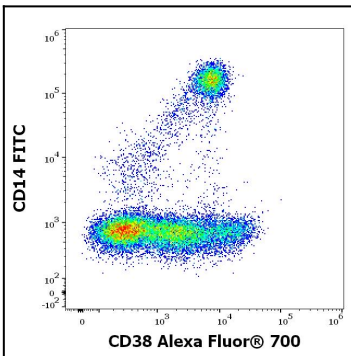


Figure 2: Flow cytometry multicolor surface staining pattern of human peripheral blood mononuclear cells stained using anti-human CD14 (MEM-15) FITC antibody and anti-human CD38 (HIT2) Alexa Fluor® 700 antibody

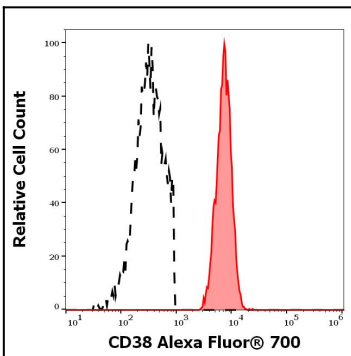


Figure 3: Separation of human CD14 positive CD38 positive monocytes (red-filled) from CD38 negative lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD38 (HIT2) Alexa Fluor® 700 antibody