

## **TECHNICAL DATA SHEET**

## CyFlow™ CD38 Alexa Fluor™ 700 Anti-Hu; Clone HIT2



AU703073

# For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

#### **Specifications**

Antigen	CD38
Alternative Names	T10
Clone	HIT2
Clonality	monoclonal
Format	Alexa Fluor™ 700
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	_
Quantity	100 tests
Immunogen	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.

#### **Contact Information:**

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#### **Application**

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 4  $\mu$ l reagent / 100  $\mu$ l 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

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

#### **Background Information**

CD38 (NAD+ 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+ glycohydrolase converting NAD+ 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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