

Datasheet for ABIN125718 anti-CD38 antibody (PE)



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Overview

Quantity:	100 tests
Target:	CD38
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CD38 antibody is conjugated to PE
Application:	Flow Cytometry (FACS)

Product Details

Immunogen:	Human thymocytes in foetus
Clone:	HIT2
Isotype:	IgG1
Specificity:	The mouse monoclonal antibody HIT2 reacts with an extracellular epitope of CD38, 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. Its binding is blocked by daratumumab.
Cross-Reactivity (Details):	Human
Purification:	Purified antibody is conjugated with R-phycoerythrin (PE) under optimum conditions. Unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

Target Details

Target:	CD38
Abstract:	CD38 Products
Background:	CD38 Molecule,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.,ADPRC1, cADPr hydrolase 1, T10, NAD(+) nucleosidase, ADP-ribosyl cyclase 1
Gene ID:	952
UniProt:	P28907

Application Details

Application Notes:	Flow cytometry: The reagent is designed for analysis of human blood cells using 20 µL reagent / 100 µL of whole blood or 10 ⁶ cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests.
Comment:	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.
Restrictions:	For Research Use only

Handling

Reconstitution:	No reconstitution is necessary.
Buffer:	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Do not freeze. Avoid prolonged exposure to light.
Storage:	4 °C

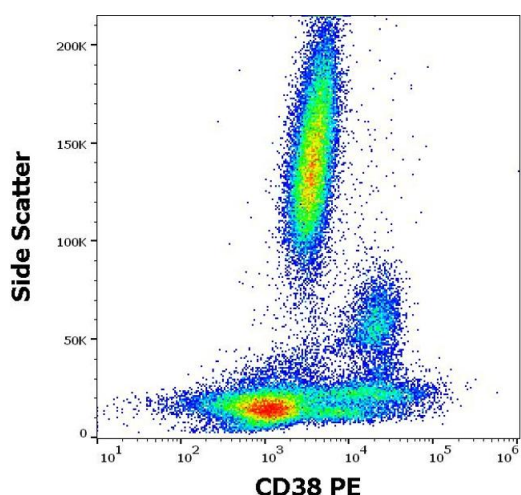
Handling

Storage Comment: Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Publications

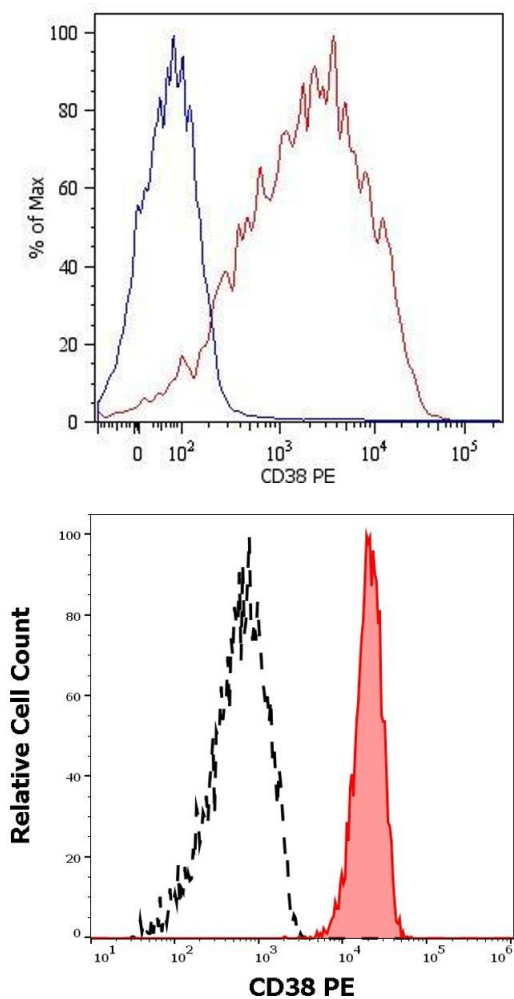
- Product cited in:
- Brodská, Otevřelová, Šálek, Fuchs, Gašová, Kuželová: "High PD-L1 Expression Predicts for Worse Outcome of Leukemia Patients with Concomitant NPM1 and FLT3 Mutations." in: **International journal of molecular sciences**, Vol. 20, Issue 11, (2019) ([PubMed](#)).
- Všianská, Říhová, Varmužová, Suská, Kryukov, Mikulášová, Kupská, Penka, Pour, Adam, Hájek: "Analysis of B-cell subpopulations in monoclonal gammopathies." in: **Clinical lymphoma, myeloma & leukemia**, Vol. 15, Issue 4, pp. e61-71, (2015) ([PubMed](#)).
- Rozková, Novotná, Pytlík, Hochová, Kozák, Bartňková, Spísek: "Toll-like receptors on B-CLL cells: expression and functional consequences of their stimulation." in: **International journal of cancer. Journal international du cancer**, Vol. 126, Issue 5, pp. 1132-43, (2010) ([PubMed](#)).
- Kolar, Mehta, Pelayo, Capra: "A novel human B cell subpopulation representing the initial germinal center population to express AID." in: **Blood**, Vol. 109, Issue 6, pp. 2545-52, (2007) ([PubMed](#)).

Images



Flow Cytometry

Image 1. Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD38 (HIT2) PE antibody (20 µL reagent / 100 µL of peripheral whole blood).



Flow Cytometry

Image 2. Surface staining of PHA stimulated human peripheral blood lymphocytes with anti-human CD38 (HIT2) PE.

Flow Cytometry

Image 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 antibody (20 µL reagent / 100 µL of peripheral whole blood).