Product Datasheet

CD38 Antibody (FITC) (orb43853)

Catalog Number	orb43853
Category	Antibodies
Description	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
Target	CD38
Clonality	Monoclonal
Isotype	Mouse IgG1
Conjugation	FITC
Reactivity	Human
Buffer/Preservatives	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Purification	Purified antibody is conjugated with fluorescein isothiocyanate (FITC) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
Immunogen	Human thymocytes in foetus
UniProt ID	P28907
RRID	AB_11013144
Tested applications	FC

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Application notes	Flow cytometry: The reagent is designed for analysis of human blood cells using 20 µl reagent / 100 µl of whole blood or 106 cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests.
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.
Antibody Type	Primary Antibody
Clone Number	HIT2
Storage	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.
Background	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. CD38 belongs to markers of B cell subsets, leukemia, and a target of immunotherapy in myeloma treatment
Note	For research use only
Entrez	**952**
Expiration Date	12 months from date of receipt.

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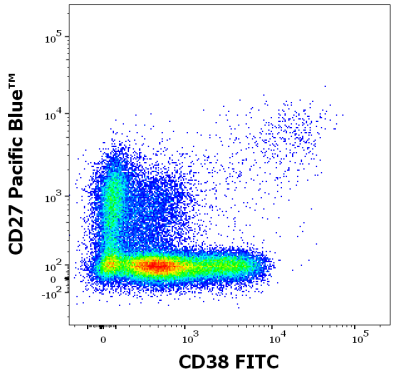
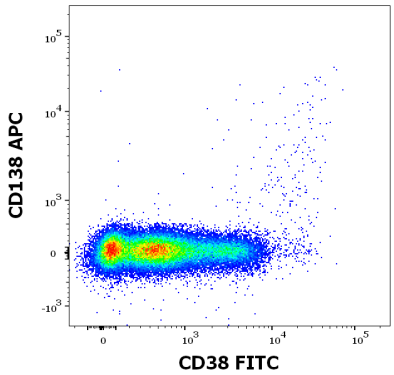
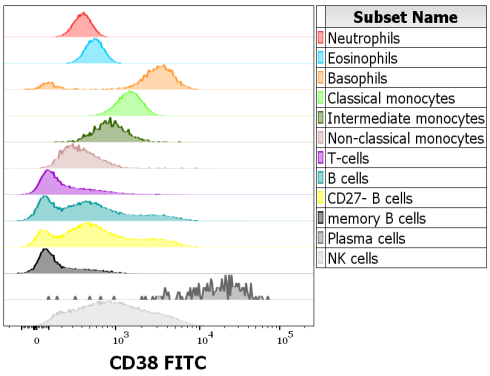


Staining pattern of Anti-human CD38 FITC antibody (clone HIT2) in dot-plot fluorescence visualization (B cell gate). Analysis of the antibody staining profile was performed on blood leukocytes isolated from buffy coats. Mouse monoclonal anti-human CD38 FITC antibody (clone HIT2) in concentration 0.5 µg/ml in stained stained blood sample (2 x 10^6 cells) and Mouse monoclonal anti-human CD27 Pacific Blue™ antibody (clone LT27) was used in concentration 2 µg/ml, respectively.



Staining pattern of Anti-human CD38 FITC antibody (clone HIT2) in dot-plot fluorescence visualization (B cell gate). Analysis of the antibody staining profile was performed on blood leukocytes isolated from buffy coats. Mouse monoclonal anti-human CD38 FITC antibody (clone HIT2) in concentration 0.5 µg/ml in stained stained blood sample (2 x 10^6 cells) and Mouse monoclonal anti-human CD138 APC antibody (clone MI15) in concentration 2 µg/ml, respectively.



Reactivity of Anti-human CD38 FITC antibody (clone HIT2) on human peripheral leukocytes. Analysis of the antibody staining profile was performed on blood leukocytes isolated from buffy coats. Suspension of blood leukocytes (2 x 10^6 cells) was added to the mixture of CD38 FITC antibody (clone HIT2, 0.5 µg/ml in stained blood sample), backbone antibody conjugates and Monocyte Blocking Buffer, vortexed and incubated for 20 min. Stained sample was fixed with 2 ml of 10× diluted EXCELLYSE Easy solution for 10 min. Finally, samples were centrifuged (670 g, 5 min.), supernatant removed and the cell pellet was resuspended in 200 µl of PBS for acquisition.

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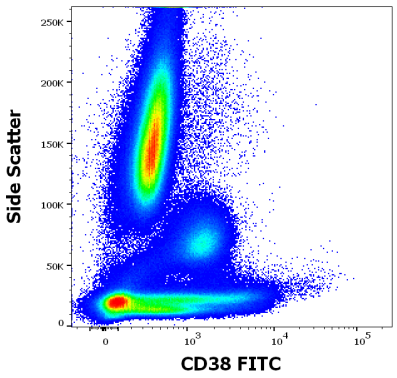

Anti-human CD38 FITC antibody (clone HIT2) works in flow cytometry application. Analysis of the antibody staining profile was performed on blood leukocytes isolated from buffy coats. Mouse monoclonal anti-human CD38 FITC antibody (clone HIT2) was used in concentration 0.5 µg/ml in stained blood sample (2 x 10^6 cells).

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