abcam

**ab233569**

# PE/Cy7® Anti-CD38 antibody [HIT2]

Anti-CD38 antibody [HIT2] conjugated to PE/Cy7® - suitable for flow cytometry, and reacts with human samples. Clone [HIT2] is a mouse monoclonal antibody and one of the most commonly used clones for flow cytometry.

Design your panel with our interactive flow cytometry panel builder. Click here.

## Key facts

| | |
|---|---|
| **Isotype** | IgG1 |
| **Host species** | Mouse |
| **Conjugation** | PE/Cy7® |
| **Excitation/Emission** | Ex: 565nm, Em: 778nm |
| **Storage buffer** | pH: 7.4 Preservative: 0.0975% Sodium azide Constituents: PBS |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | Cell preparation containing CD38 protein. The exact immunogen used to generate this antibody is proprietary information. Database link P28907 |
| **Clone number** | HIT2 |
| **Purification technique** | Size-exclusion chromatography |

## Reactivity data

## Flow Cyt

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 4 µL for $10^6$ Cells |

| | |
|---|---|
| **Notes** | - |

## Target data

See full target information CD38

| | |
|---|---|
| **Function** | Multifunctional transmembrane glycoprotein able to exert enzymatic activities and also to mobilize calcium, to transduce signals, to adhere to hyaluronan and to other ligands. Synthesizes cyclic ADP-ribose (cADPR), a second messenger for glucose-induced insulin secretion (PubMed:7961800, PubMed:8253715). Synthesizes the Ca(2+) mobilizer nicotinate-adenine dinucleotide phosphate, NAADP(+), from 2'-phospho-cADPR and nicotinic acid, as well as from NADP(+) and nicotinic acid. At both pH 5.0 and pH 7.4 preferentially transforms 2'-phospho-cADPR into NAADP(+), while preferentially cleaving NADP(+) to cADPR and ADPRP rather than into NADDP(+) (PubMed:16690024). Has cADPR hydrolase activity (PubMed:7961800, PubMed:8253715). Functions also as a receptor that binds the ligand CD31 on endothelial cells, promoting lymphocyte activation, proliferation, and migration across the endothelial barrier (PubMed:9551996). Involved in the regulation of crucial dendritic cell functions acquired at the mature stage, such as CCL21-driven migration, survival, and Th1-polarizing activity (PubMed:16293598). In lamina propria T lymphocytes, CD38/CD31 cognate interactions initiate a multistep signaling pathway resulting in activation of LCK anf LAT, followed by cytokine release (PubMed:11259373). |

## Storage

| | |
|---|---|
| **Shipped at conditions** | Blue Ice |
| **Appropriate short-term storage conditions** | +4°C |
| **Appropriate long-term storage conditions** | +4°C |
| **Storage information** | Store in the dark |

## Notes

This product or portions thereof is manufactured under license from Carnegie Mellon University under U.S. Patent Number 5, 268, 486 and related patents. Cy® and CyDye® are trademarks of Cytiva.

## Product promise

**Tested**

We have tested this species and application combination and it works. It is covered by our product promise.

**Expected**

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

**Predicted**

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

**Not recommended**

We do not recommend this combination. It is not covered by our product promise.

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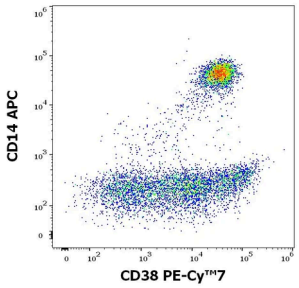
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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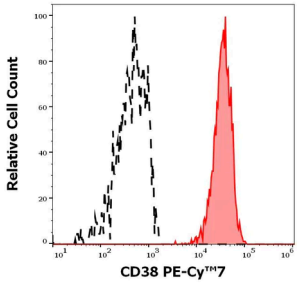
## 3 product images




### Flow Cytometry - PE/Cy7® Anti-CD38 antibody [HIT2] (ab233569)

Flow cytometry multicolor surface staining pattern of human peripheral blood mononuclear cells stained using anti-human CD14 (MEM-15) APC antibody (10 µl reagent / 100 µl of peripheral whole blood) and anti-human CD38 (HIT2) PE-Cy™7 antibody (4 µl reagent / 100 µl of peripheral whole blood).

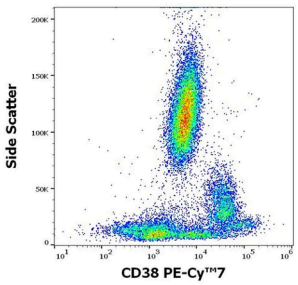
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### Flow Cytometry - PE/Cy7® Anti-CD38 antibody [HIT2] (ab233569)

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™7 antibody (4 µl reagent / 100 µl of peripheral whole blood).

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## Flow Cytometry - PE/Cy7® Anti-CD38 antibody [HIT2] (ab233569)

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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.