

# **Human BTN3A1/2/3 Antibody**

Recombinant Monoclonal Mouse IgG<sub>1</sub> Clone # 849203 Catalog Number: MAB7136

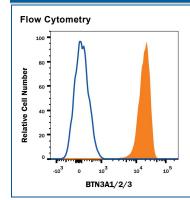
| DESCRIPTION        |   |  |
|--------------------|---|--|
| Species Reactivity | Human   |  |
| Specificity        | Detects human BTN3A1, BTN3A2 and BTN3A3 in direct ELISAs.   |  |
| Source             | Recombinant Monoclonal Mouse IgG <sub>1</sub> Clone # 849203  |  |
| Purification       | Protein A or G purified from cell culture supernatant   |  |
| Immunogen          | Chinese hamster ovary cell line CHO-derived recombinant human CD277/BTN3A1 Met1-Gly254 Accession # O00481   |  |
| Formulation        | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.  *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS. |  |

#### APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

|                | Recommended<br>Concentration   | Sample    |
|----------------|--|-----------|
| Flow Cytometry | 0.25 μg/10 <sup>6</sup> cells  | See Below |
| CyTOF-ready    | Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation. |           |

### DATA



Detection of BTN3A1/2/3 in Human Lymphocytes by Flow Cytometry. Human peripheral blood lymphocytes were stained with Mouse Anti-Human BTN3A1/2/3 Monoclonal Antibody (Catalog # MAB7136, filled histogram) or isotype control antibody (Catalog # Catalog # MAB002, open histogram), followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # Catalog # F0101B).

# PREPARATION AND STORAGE

Reconstitution Reconstitute at 0.5 mg/mL in sterile PBS

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

\*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

## BACKGROUND

Butyrophilin 3A1 (BTN3A1), also known as CD277, has high structural homology to the B7 superfamily of proteins and is expressed in various immune cells such as T and NK cells. BTN3A1 enhances TCR-induced cytokine production and cell proliferation. Early T-cell activation events such as TCR-induced cell signaling are increased upon BTN3A1 engagement. The BTN3A1 co-stimulatory pathway may be involved in the regulation of various cell-mediated immune responses.

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