

MONOCLONAL ANTIBODY

Anti-BTN2A1 (Human) mAb

Code No.	Clone	Subclass	Quantity	Concentration
W005-3	1C7D	Mouse IgG3 κ	100 μ L	1 mg/mL

BACKGROUND: Butyrophilin subfamily 2 member A1, also known as BTN2A1, belongs to the immunoglobulin superfamily. This protein is an integral plasma membrane protein involved in lipid, fatty-acid, and sterol metabolism. BTN2A1 is highly expressed in brain, bone marrow, small intestine, muscle, spleen, and pancreas. Over expression of BTN2A1 at mRNA levels is also observed in a colon cancer cell line HT-29.

SOURCE: This antibody was purified from hybridoma culture supernatant by Protein A affinity column chromatography.

IMMUNOGEN: Human BTN2A1 expressed Ba/F3 transfectants generated from SST-REX (signal sequence trap by retrovirus-mediated expression screening).

FORMULATION: 100 μ g IgG in 100 μ L volume of PBS containing 50% glycerol, pH 7.2. No preservative is contained.

STORAGE: This antibody solution is stable for one year from the date of purchase when stored at -20°C .

REACTIVITY: This antibody reacts with human BTN2A1 on Flow cytometry.

APPLICATIONS:

- Flow cytometry: 1-10 μ g/mL
- Western blotting: Not tested
- Immunoprecipitation: Not tested
- Immunohistochemistry: Not tested
- Immunocytochemistry: Not tested

Detailed procedure is provided in the following **PROTOCOL**.

INTENDED USE:

For Research Use Only. Not for use in diagnostic procedures.

Entrez Gene ID:

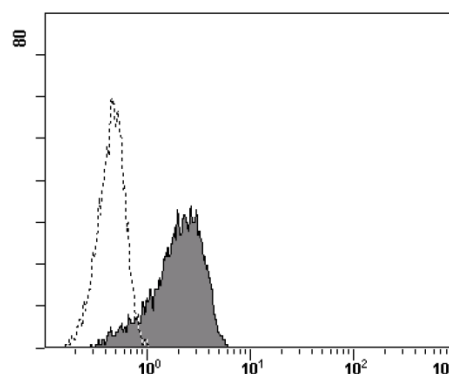
11120 (Human)

REFERENCES:

- 1) Kojima, T and Kitamura, T. *Nat. Biotechnol.* **17**, 487-490 (1999)
- 2) Ruddy, D. A., *et al.*, *Genome Res.* **7**, 441-456 (1997)

SPECIES CROSS REACTIVITY:

Species	Human	Mouse	Rat	Hamster
Cells	Transfectant	Not tested	Not tested	Not tested
Reactivity on FCM	+			



Flow cytometric analysis of human BTN2A1 expression on Ba/F3 transfectant. Open histograms indicate the reaction of isotypic control to the cells. Shaded histograms indicate the reaction of W005-3 to the cells.

PROTOCOL:

Flow cytometric analysis for floating cells

We usually use Fisher tubes or equivalents as reaction tubes for all steps described below.

- 1) Wash the cells 3 times with washing buffer [PBS containing 2% fetal calf serum (FCS) and 0.05% NaN_3].
- 2) Resuspend the cells with washing buffer (2.5×10^6 cells/mL).
- 3) Add 200 μ L of cell suspension into each tube. And centrifuge at 500 x g for 1 minute at room temperature ($20\sim 25^{\circ}\text{C}$). Remove supernatant by careful decantation.
- 4) Add 20 μ L of Clear Back (human Fc receptor blocking reagent, MBL; code no. MTG-001) to the cell pellet after tapping. Mix well and incubate for 5 minutes at room temperature.
- 5) Add 50 μ L of the primary antibody at the concentration as suggest in the **APPLICATIONS** diluted in the washing buffer. Mix well and incubate for 30 minutes at room temperature.
- 6) Add 1 mL of the washing buffer followed by centrifugation at 500 x g for 1 minute at room temperature. Remove supernatant by careful decantation.
- 7) Add 50 μ L of 1:200 anti-mouse IgG-PE (Beckman

Coulter; code no. IM0855) diluted with the washing buffer. Mix well and incubate for 30 minutes at room temperature.

- 8) Add 1 mL of the washing buffer followed by centrifugation at 500 x g for 1 minute at room temperature. Remove supernatant by careful decantation.
- 9) Resuspend the cells with 500 µL of the washing buffer and analyze by a flow cytometer.

(Positive control for Flow cytometry; transfectant)

RELATED PRODUCTS:

- W005-3 Anti-BTN2A1 (Human) mAb
- W008-3 Anti-Carboxypeptidase D (Human) mAb
- W011-3 Anti-Dystroglycan (Human) mAb
- W017-3 Anti-EphA2 (Human) mAb
- W029-3 Anti-IGFBP1 (Human) mAb
- W050-3 Anti-RECK (Human) mAb
- W086-3 Anti-LYPD3 (C4.4A) (Human) mAb
- W089-3 Anti-C11orf24 (Human) mAb
- W124-3 Anti-GPR56 (Human) mAb
- W125-3 Anti-GPR56 (Human) mAb
- W194-3 Anti-FAM171A1 (Human) mAb
- W253-3 Anti-Glypican 1 (Human) mAb
- W357-3 Anti-CD105 (Endoglin) (Human) mAb
- W358-3 Anti-CD300A (Human) mAb
- W359-3 Anti-CD300C (Human) mAb

- M078-3 Mouse IgG3 (isotype control)
- MTG-001 Clear Back (Human Fc receptor blocking reagent)