

MONOCLONAL ANTIBODY

Anti-Dystroglycan (Human) mAb

Code No.	Clone	Subclass	Quantity	Concentration
W011-3	3E3-34	Mouse IgG2b κ	100 μ L	1 mg/mL

BACKGROUND: Dystroglycan is also known as Dystrophin-Associated Glycoprotein 1 (DAG1). Dystroglycan works as a transmembrane linkage between the extracellular matrix and the cytoskeleton in skeletal muscle. It also serves as a receptor of Argin, which is a component of the synaptic basal lamina. Reduced expression of Dystroglycan is observed in adenocarcinoma, and its re-expression may be involved in tumor invasiveness and metastasis in prostate cancer.

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

IMMUNOGEN: Human Dystroglycan 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 Dystroglycan 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:

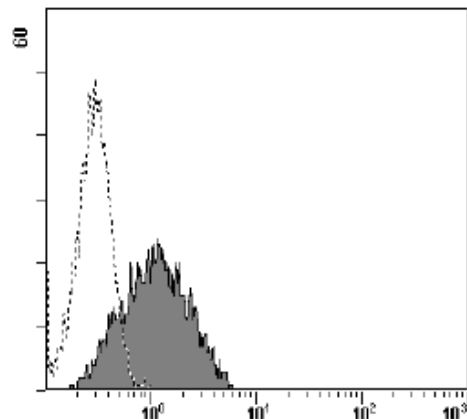
1605 (Human)

SPECIES CROSS REACTIVITY:

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

REFERENCES:

- 1) Mitchell, A., *et al.*, Prostate. **73**, 398-408 (2013)
- 2) Hara, Y., *et al.*, *N. Eng. J. Med.* **364**, 939-946 (2011)
- 3) Kojima, T and Kitamura, T. *Nat. Biotechnol.* **17**, 487-490 (1999)
- 4) Matsumura, K., *et al.*, *J. Clin. Invest.* **92**, 866-871 (1993)
- 5) Ibraghimov-Beskrovnaya, O., *et al.*, *Hum. Mol. Genet.* **2**, 1651-1657 (1993)



Flow cytometric analysis of human Dystroglycan expression on Ba/F3 transfectant. Open histograms indicate the reaction of isotypic control to the cells. Shaded histograms indicate the reaction of W011-3 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

- (20~25°C). Remove supernatant by careful decantation.
- 4) Add 20 µL 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 µL 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 µL 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
M077-3	Mouse IgG2b (isotype control)
MTG-001	Clear Back (Human Fc receptor blocking reagent)