

MONOCLONAL ANTIBODY

Anti-CD300A (Human) mAb

Code No.	Clone	Subclass	Quantity	Concentration
W358-3	6-2A	Rat IgG2a κ	100 μL	1 mg/mL

BACKGROUND: CD300A is a member of the CD300 (also called CLM, LMIR, MAIR and IREM) family. The CD300 family of paired immune receptors consists of several activating and inhibitory receptors harboring a single immunoglobulin-like domain. Human CD300A is an inhibitory receptor containing immunoreceptor tyrosine based inhibitory motif (ITIM) in the cytoplasmic region. Human CD300A is mainly expressed in natural killer (NK) cells, monocytes, mast cells, and granulocytes.

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

FORMULATION: 100 μg IgG in 100 μL 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 CD300A on Flow cytometry.

APPLICATIONS:

- Flow cytometry; 1-10 μg/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:

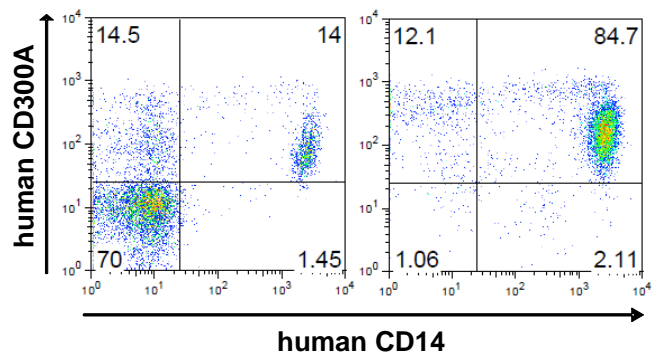
11314 (Human)

REFERENCE:

- 1) Takahashi M., *et al.*, *J Biol Chem.* **288**, 7662-7675 (2013) [FCM]

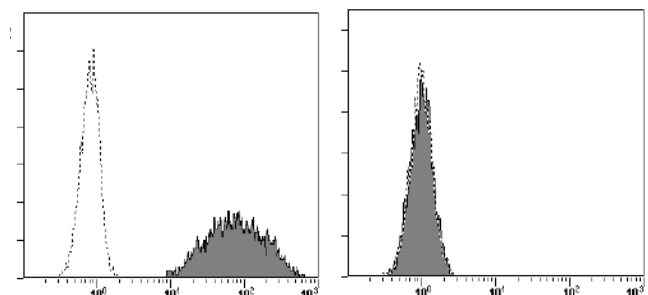
SPECIES CROSS REACTIVITY:

Species	Human	Mouse	Rat	Hamster
Cells	Transfectant, Monocytes, NK cells, PDCs	Not tested	Not tested	Not tested
Reactivity on FCM	+			



Flow cytometric analysis of human CD300A expression on PBMC (left) and monocytes (right).

The data were kindly provided by Dr. Jiro Kitaura, M.D. Ph.D. (Division of Cellular Therapy, Advanced Clinical Research Center, The Institute of Medical Science, The University of Tokyo)



Flow cytometric analysis of human CD300A expression on CD300A (left) or CD300C (right) transfected Ba/F3. Open histograms indicate the reaction of isotypic control to the cells. Shaded histograms indicate the reaction of W358-3 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 0.1% NaN₃].
- 2) Resuspend the cells with washing buffer (2.5 x 10⁶ cells/mL).
- 3) Add 200 µL 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 PE conjugated anti-rat IgG (Beckman Coulter no. IM1623) 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:

D177-3	Anti-CD300a (MAIR-I) (Mouse) mAb
D177-4	Anti-CD300a (MAIR-I) (Mouse) mAb-FITC
D178-3	Anti-CD300a/d (MAIR-I/II) (Mouse) mAb
D178-4	Anti-CD300a/d (MAIR-I/II) (Mouse) mAb-FITC
D179-3	Anti-CD300d (MAIR-II) (Human) mAb
M081-3	Rat IgG2a Isotype control
MTG-001	Clear Back (Human Fc receptor blocking reagent)