

MONOCLONAL ANTIBODY

# Anti-Apolipoprotein D (Human) mAb

Code No.	Clone	Subclass	Quantity	Concentration
W181-3	2H11L	Mouse IgG2a $\kappa$	100 $\mu$ L	1 mg/mL

**BACKGROUND:** Apolipoprotein D, also known as ApoD, is a small glycoprotein of 29 kDa that belongs to the lipocalin superfamily of lipid transport proteins. ApoD is a component of high-density lipoprotein in human plasma. ApoD can bind cholesterol, progesterone, pregnenolone, bilirubin, and arachidonic acid. ApoD is expressed in various tissues including the liver, intestine, pancreas, kidney, placenta, adrenal glands, spleen, fetal brain tissue, as well as in tears. Increased ApoD levels in the hippocampus and in cerebrospinal fluid serve as marker of neuropathology, including Alzheimer's diseases. ApoD also highly exists in the cyst fluid of women with gross cystic disease of the breast, a condition associated with increased risk of breast cancer.

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

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

**FORMULATION:** 100  $\mu$ g IgG in 100  $\mu$ 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  $-20^{\circ}\text{C}$ .

**REACTIVITY:** This antibody reacts with human Apolipoprotein D on Flow cytometry.

**APPLICATIONS:**

- Flow cytometry; 1-10  $\mu$ 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.

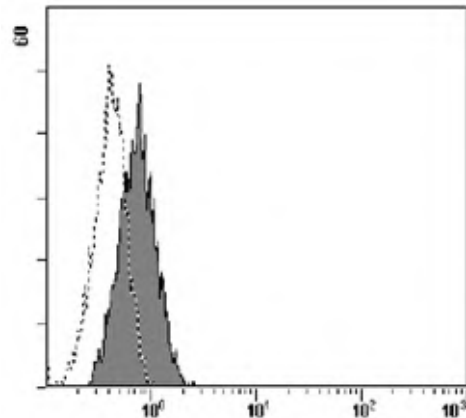
**Entrez Gene ID:**  
347 (Human)

**REFERENCES:**

- 1) Kojima, T. and Kitamura, T., *Nat. Biotechnol.* **17**, 487-490 (1999)
- 2) Yang, C. Y., *et al.*, *Biochemistry* **33**, 12451-12455 (1994)
- 3) Peitsch, M. C. and Boguski, M. S., *New Biol.* **2**, 197-206 (1990)
- 4) Balbin, M., *et al.*, *Biochem. J.* **271**, 803-807 (1990)

**SPECIES CROSS REACTIVITY:**

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



**Flow cytometric analysis of human Apolipoprotein D expression on Ba/F3 transfectant.** Open histograms indicate the reaction of isotypic control to the cells. Shaded histograms indicate the reaction of W181-3 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%  $\text{NaN}_3$ ].
- 2) Resuspend the cells with washing buffer ( $2.5 \times 10^6$  cells/mL).
- 3) Add 200  $\mu$ 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)

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|---------|---|
| W005-3  | Anti-BTN2A1 (Human) mAb                         |
| W008-3  | Anti-Carboxypeptidase D (Human) mAb             |
| W010-3  | Anti-CCDC107 (Human) mAb                        |
| W011-3  | Anti-Dystroglycan (Human) mAb                   |
| W017-3  | Anti-EphA2 (Human) mAb                          |
| W029-3  | Anti-IGFBP1 (Human) mAb                         |
| W031-3  | Anti-IGFBP6 (Human) mAb                         |
| W039-3  | Anti-MANSC1 (Human) mAb                         |
| W041-3  | Anti-Neuroplastin (Human) mAb                   |
| W046-3  | Anti-CD201 (EPCR) (Human) mAb                   |
| W049-3  | Anti-QSOX1 (Human) mAb                          |
| W050-3  | Anti-RECK (Human) mAb                           |
| W052-3  | Anti-Osteopontin (SPP1) (Human) mAb             |
| W072-3  | Anti-CD358 (DR6) (Human) mAb                    |
| W074-3  | Anti-CRELD1 (Human) mAb                         |
| W077-3  | Anti-GRK5 (Human) mAb                           |
| W080-3  | Anti-ADAMTS1 (Human) mAb                        |
| W086-3  | Anti-LYPD3 (C4.4A) (Human) mAb                  |
| W089-3  | Anti-C11orf24 (Human) mAb                       |
| W109-3  | Anti-TMED2 (Human) mAb                          |
| W111-3  | Anti-DLL4 (Human) mAb                           |
| W117-3  | Anti-TINAGL1 (Human) mAb                        |
| W124-3  | Anti-GPR56 (Human) mAb                          |
| W125-3  | Anti-GPR56 (Human) mAb                          |
| W128-3  | Anti-CD318 (CDCP1) (Human) mAb                  |
| W147-3  | Anti-TYRO3 (Human) mAb                          |
| W158-3  | Anti-HEXA (Human) mAb                           |
| W164-3  | Anti-RHBDD3 (Human) mAb                         |
| W172-3  | Anti-CD172a (SIRPα) (Human) mAb                 |
| W181-3  | Anti-Apolipoprotein D (Human) mAb               |
| W194-3  | Anti-FAM171A1 (Human) mAb                       |
| W253-3  | Anti-Glypican 1 (Human) mAb                     |
| W321-3  | Anti-FGFRL1 (Human) mAb                         |
| W357-3  | Anti-CD105 (Endoglin) (Human) mAb               |
| W358-3  | Anti-CD300A (Human) mAb                         |
| W359-3  | Anti-CD300C (Human) mAb                         |
| M076-3  | Mouse IgG2a (isotype control)                   |
| MTG-001 | Clear Back (Human Fc receptor blocking reagent) |

**RELATED PRODUCTS:**