

Monoclonal Antibody to CD165

Alternate names:	AD2, gp37
Catalog No.:	AM26680FC-N
Quantity:	50 µg
Concentration:	50 µg/ml
Background:	CD44 (H-CAM/Pgp-1/Hermes antigen/ECMR-III/HUTCH-I) is a highly glycosylated transmembrane protein expressed by lymphocytes, fibroblasts, smooth muscle cells, and epithelial cells. CD44 functions as lymphocyte adhesion molecule, acting as a matrix receptor that mediates cell adhesion to the extracellular matrix. CD44 is also involved in T-lymphocyte activation, lymphocyte homing, cell migration, and hemopoiesis. Expression of CD44 on the cell surface changes profoundly during tumor metastasis, and the transition from non-metastatic to metastatic tumor cell variants is associated with expression of CD44 variants (CD44v's), making CD44 a potential cancer marker.
Host / Isotype:	Mouse / IgG1
Clone:	AD2
Immunogen:	HSB cells
Format:	State: Liquid Ig fraction Purification: Protein-A Sepharose Buffer System: PBS Preservatives: 0.09% NaN ₃ Stabilizers: 1% BSA
Applications:	Flow cytometry: 20 L (ready for use); see protocol below. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody reacts with CD44.
Species Reactivity:	Tested: Human
Add. Information:	This product was originally produced by MBL International.
Storage:	Store at 2 - 8 °C. Shelf life: one year from despatch.
General Readings:	1. Kozaki, K., et al., Cancer Res. 60, 2535-2540 (2000). 2. Sugiyama, K., et al., Immunol Invest. 28, 185-200 (1999).
Protocols:	Flow cytometric analysis for floating cells We usually use Fisher tubes or equivalents as reaction tubes for all step described below. 1) Wash the cells 3 times with washing buffer [PBS containing 2% fetal calf serum (FCS) and 0.1% NaN ₃]. 2) Resuspend the cells with washing buffer (5x10 ⁶ cells/mL).

- 3) Add 50 L of the cell suspension into each tube, and centrifuge at 500 x g for 1 minute at room temperature (20~25°C). Remove supernatant by careful aspiration.
- 4) Add 10 L of normal goat serum containing 1 mg/mL normal human IgG and 0.1% NaN₃ to the cell pellet after tapping. Mix well and incubate for 5 minutes at room temperature.
- 5) Add 20 L of PE labeled CD44 (15C6). Mix well and incubate for 20 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 aspiration.
- 7) Resuspend the cells with 500 L of the washing buffer and analyze by a flow cytometer.

Flow cytometric analysis for whole blood cells

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

- 1) Add 20 L of PE labeled CD44 monoclonal antibody (15C6) into each tube.
- 2) Add 100 L of whole blood into each tube. Mix well, and incubate for 30 minutes at room temperature (20~25 °C).
- 3) Add 1 mL of washing buffer [PBS containing 2% fetal calf serum (FCS) and 0.1% NaN₃] followed by centrifugation at 500 x g for 1 minute at room temperature. Remove supernatant by careful aspiration.
- 4) Lyse with OptiLyse C (for analysis on Beckman Coulter instruments) or OptiLyse B (for analysis on BD instruments), using the procedure recommended in the respective package inserts.
- 5) Add 1 mL of H₂O to each tube and incubate for 10 minutes at room temperature.
- 6) Centrifuge at 500 x g for 1 minute at room temperature. Remove supernatant by careful aspiration.
- 7) Add 1 mL of washing buffer followed by centrifugation at 500 x g for 1 minute at room temperature. Remove supernatant by careful aspiration.
- 8) Resuspend the cells with 500 L of the washing buffer and analyze by a flow cytometer.