

# Product Data Sheet

## Biotin anti-human CD109

**Catalog # / Size:** 323304 / 100 µg

**Clone:** W7C5

**Isotype:** Mouse IgG1, κ

**Immunogen:** WERI-RB-1 retinoblastoma cell line

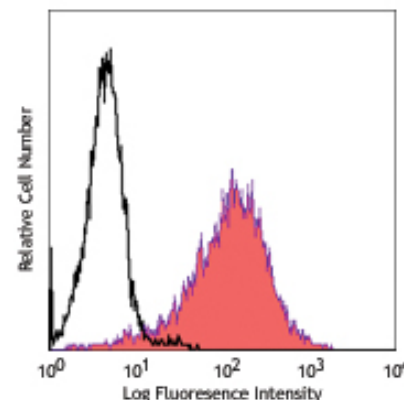
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.5 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C. **Do not freeze.**



Human monocytic cell line THP-1 stained with biotinylated W7C5, followed by SAV-PE

## Applications:

**Applications:** FC - *Quality tested*

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is  $\leq 0.5$  µg per  $10^6$  cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

**Application References:**

1. Giesert C, *et al.* In: Hematopoietic Stem Cells 2002: Genetics and function.
2. Orlic D, *et al.* 2003. *Ann. New York Acad. Sci.* 996:227.
3. Vogel W, *et al.* 2002. *Haematologica* 88:126.

**Description:** The W7C5 monoclonal antibody recognizes human CD109 also known as the Gov platelet alloantigen. CD109 is a member of the alpha2-macroglobulin/complement gene family that is a GPI-linked cell surface antigen with a predicted molecular weight approximately 162 kD. CD109 contains a thioester motif characteristic of alpha-2-macroglobulin that undergoes autolytic cleavage under denaturing conditions. CD109 expression has been reported on CD34<sup>+</sup> and CD34<sup>-</sup> bone marrow stem cells, CD34<sup>+</sup> cells in the fetal liver, CD34<sup>+</sup> acute myeloid leukemia cells, T cell lines, activated T lymphoblasts, activated platelets, and endothelial cells. It is also widely expressed in the brain, uterus, heart, lung, and trachea of adults. The function of CD109 is largely unknown although it has been implicated in refractoriness to platelet transfusion, neonatal alloimmune thrombocytopenia, and post-transfusion purpura.

**Antigen References:**

1. Lin M, *et al.* 2002. *Blood* 99:1683.
2. Schuh AC, *et al.* 2002. *Blood* 99:1692.
3. Solomon KR, *et al.* 2004. *Gene* 327:171.

### Related Products:

**Product**  
 Biotin Mouse IgG1, κ Isotype Ctrl  
 APC Streptavidin  
 APC/Cy7 Streptavidin  
 PE Streptavidin  
 PE/Cy5 Streptavidin  
 PE/Cy7 Streptavidin  
 Cell Staining Buffer  
 Human TruStain FcX™ (Fc Receptor Blocking Solution)

**Clone**  
 MOPC-21

### Application

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