



## Biotinylated Anti-human CMG-2 Antibody

### ORDERING INFORMATION

**Catalog Number:** BAF2940

**Lot Number:** WNN01

**Size:** 50 µg

**Formulation:** 0.2 µm filtered solution in PBS with BSA

**Storage:** -20° C

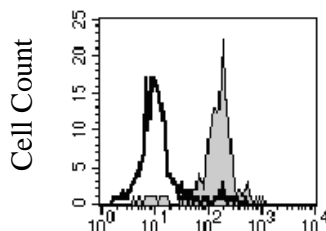
**Reconstitution:** sterile 0.1% BSA in TBS

**Specificity:** human CMG-2 extracellular domain

**Immunogen:** NS0-derived rhCMG-2 extracellular domain

**Ig Type:** goat IgG

**Application:** Western blot  
Flow Cytometry



CMG-2

Human blood-derived monocytes were stained with biotinylated anti-CMG-2 (R&D Systems, Cat. # BAF2940, filled histogram) or control antibody (R&D Systems, Cat. # BAF109, open histogram), followed by PE-conjugated streptavidin (R&D Systems, Cat. # F0040).

### Preparation

Produced in goats immunized with purified, NS0-derived, recombinant human Capillary Morphogenesis Gene-2 isoform 1 (rhCMG-2; aa 34 - 317; Accession # P58335) extracellular domain. Human CMG-2 specific IgG was purified by human CMG-2 affinity chromatography and then biotinylated. CMG-2 is an anthrax toxin receptor (ATR) family protein that contains a von Willebrand factor type A domain. As a result of alternative splicing, at least four isoforms of secreted or type I membrane proteins exist. CMG-2 is widely expressed in human tissues. It binds selectively to collagen type IV and laminin and is also capable of binding the protective antigen (PA) of *Bacillus Anthracis* in a divalent cation-dependent manner. Soluble CMG-2 is a potent antitoxin and may be used as a treatment of anthrax. Within the region used as immunogen, human and mouse CMG-2 share 76% amino acid sequence homology.

### Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) containing 50 µg of bovine serum albumin (BSA) per 1 µg of antibody.

### Reconstitution

Reconstitute with sterile Tris-buffered saline pH 7.3 (20 mM Trizma base, 150 mM NaCl) containing 0.1% BSA. If 1 mL of buffer is used, the antibody concentration will be 50 µg/mL.

### Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

### Specificity

This antibody has been selected for use as a detection antibody in the applications listed below.

### Application

**Western Blot** - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect human CMG-2. The detection limit for rhCMG-2 is approximately 5 ng/lane under non-reducing and reducing conditions. In this format, this antibody shows approximately 20% cross-reactivity with rmCMG-2.

**Flow Cytometry** - This antibody is validated for flow cytometry using blood-derived monocytes. Dilute this antibody to 25 µg/mL and add 10 µL of this diluted solution to 1 - 2.5 x 10<sup>5</sup> cells in a total reaction volume not exceeding 200 µL. The binding of biotinylated antibodies may be visualized by adding a secondary developing reagent such as streptavidin conjugated to a fluorochrome.

**Optimal dilutions should be determined by each laboratory for each application.**

FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

**R&D Systems, Inc.**  
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