



## Monoclonal Anti-human CD63 Antibody

### ORDERING INFORMATION

**Catalog Number:** MAB5048

**Clone:** 460305

**Lot Number:** CANA01

**Size:** 100 µg

**Formulation:** 0.2 µm filtered solution in PBS  
with 5% trehalose

**Storage:** -20° C

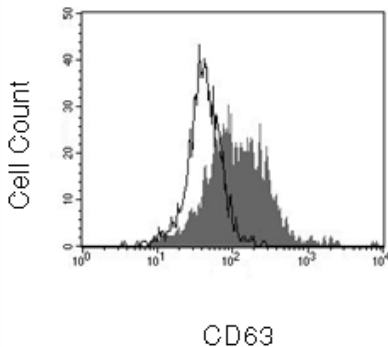
**Reconstitution:** sterile PBS

**Specificity:** human CD63

**Immunogen:** human CD63-transfected  
HEK293 cells

**Ig class:** mouse IgG<sub>1</sub>

**Recommended Application:**  
Flow cytometry



Blood-derived monocytes were stained with anti-CD63 (R&D Systems, Cat. # MAB5048, filled histogram) or isotype control (R&D Systems, Cat. # MAB002, open histogram) followed by PE-conjugated anti-mouse antibody (R&D Systems, Cat. # F0102B).

### Background

CD63, also known as LAMP-3 or ME491 (melanoma-associated antigen), is a 30 - 60 kDa member of the tetraspanin superfamily of protein trafficking proteins. CD63 is ubiquitously expressed and found in late endocytic vesicles, but following cell activation is also present on the plasma membrane. Interaction of CD63 with other membrane proteins or adaptors regulates cell activities such as adhesion, migration and degranulation. Extracellular regions of human CD63 share 67% and 65% aa identity with mouse and rat CD63, respectively.

### Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with human CD63-transfected HEK293 cells (rhCD63; Accession # P08962). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

### Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

### Reconstitution

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 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 stains human CD63 transfectants but not irrelevant transfectants.

### Application

**Intracellular Flow cytometry** - This antibody was tested for flow cytometry using PBMCs. For intracellular staining to detect CD63, cells must first be fixed and permeabilized using 4% paraformaldehyde and 0.1% saponin in PBS. Dilute this antibody to 25 µg/mL and add 10 µL of the diluted solution to 1 - 5 x 10<sup>5</sup> cells in a total reaction volume not exceeding 200 µL. The binding of unlabeled monoclonal antibodies may be visualized by adding a secondary developing reagent such as anti-mouse IgG conjugated to a fluorochrome.

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

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**R&D Systems, Inc.**  
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