



# Monoclonal Anti-human CD58/LFA-3 Antibody

## ORDERING INFORMATION

**Catalog Number:** MAB1689

**Clone:** 248310

**Lot Number:** UHG01

**Size:** 500 µg

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

**Storage:** -20° C

**Reconstitution:** sterile PBS

**Specificity:** human CD58

**Immunogen:** NS0-derived rhCD58  
extracellular domain

**Ig class:** mouse IgG<sub>2b</sub>

**Recommended Applications:**  
Western blot  
Flow cytometry

**Other Application:**  
Direct ELISA

## 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 purified, NS0-derived, recombinant human CD58 (rhCD58) extracellular domain. The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. CD58, also named Lymphocyte Function Associated Antigen 3 (LFA-3), is a member of the CD2 family of cell surface molecules. It is expressed in hematopoietic and non-hematopoietic cell lineages. CD58 binds to CD2 and induces T cell activation.

## Formulation

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

## Reconstitution

Reconstitute with sterile PBS. If 1 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 was selected for its ability to detect human CD58 in direct ELISAs, western blots and flow cytometry experiments.

## Applications

**Western Blot** - This antibody can be used at 1 - 2 µg/mL with the appropriate secondary reagents to detect human CD58. Using a colorimetric detection system, the detection limit for rhCD58 is approximately 5 ng/lane under non-reducing and reducing conditions. Chemiluminescent detection with WesternGlo Chemiluminescent Detection Substrate (R&D Systems, Catalog # AR004) will increase sensitivity by 5 to 50 fold.

**Flow Cytometry** - Dilute this antibody to 25 µg/mL and add 10 µL of the diluted solution to 1-2.5 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 10 µL of a 25 µg/mL stock solution of a secondary developing reagent such as goat anti-mouse IgG conjugated to a fluorochrome.

**Direct ELISA** - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human CD58. The detection limit for rhCD58 is approximately 5 ng/well.

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