

# CD40 Monoclonal Antibody (HM40-3), eFluor 450, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse, Rat
Published Species	Artificial Control
Host/Isotype	Armenian hamster / IgM, kappa
Class	Monoclonal
Type	Antibody
Clone	HM40-3
Conjugate	eFluor® 450
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage Conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2574017

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 µg/test	7 Publications

## Product Specific Information

**Description:** The HM40-3 monoclonal antibody reacts with mouse and rat CD40, a 45-50 kDa type I transmembrane glycoprotein. CD40 is a member of the TNFR family and is expressed by mouse B lymphocytes, follicular dendritic cells, thymic epithelium, and a subset of peripheral T cells. CD40 regulates B cell development/maturation by inducing Ig isotype switching and in combination with other signals such as IL-4, protects B cells from surface Ig-induced apoptosis and promotes proliferation. Interaction of CD40 with CD154 (gp39), its ligand on T cells, is important in T-B cell crosstalk and plays a role in costimulation and immune regulation.

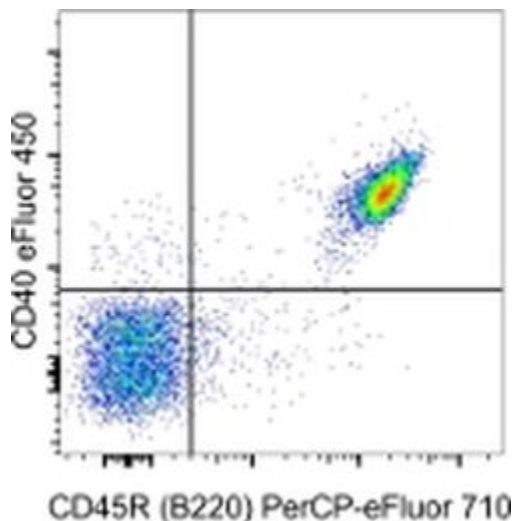
**Applications Reported:** This HM40-3 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This HM40-3 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.5 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

eFluor® 450 is an alternative to Pacific Blue®. eFluor® 450 emits at 445 nm and is excited with the Violet laser (405 nm). Please make sure that your instrument is capable of detecting this fluorochoime.

**Excitation:** 405 nm; **Emission:** 445 nm; **Laser:** Violet Laser.

**Filtration:** 0.2 µm post-manufacturing filtered.



### CD40 Antibody (48-0402-82) in Flow

Staining of mouse splenocytes with Anti-Human/Mouse CD45R (B220) PerCP-eFluor® 710 (Product # 46-0452-82) and 0.25 µg of Anti-Mouse/Rat CD40 eFluor® 450. Cells in the lymphocyte gate were used for analysis.

[View more figures on thermofisher.com](#)

## 7 References

### Flow Cytometry (7)

The FEBS journal

#### TET enzymes control antibody production and shape the mutational landscape in germinal centre B cells.

"Published figure using CD40 monoclonal antibody (Product # 48-0402-82) in Flow Cytometry"

Authors: Schoeler K,Aufschnaiter A,Messner S,Derudder E,Herzog S,Villunger A,Rajewsky K,Labi V

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2019

Scientific reports

#### Der f 31, a novel allergen from Dermatophagoides farinae, activates epithelial cells and enhances lung-resident group 2 innate lymphoid cells.

"Published figure using CD40 monoclonal antibody (Product # 48-0402-82) in Flow Cytometry"

Authors: Wang H,Lin J,Zeng L,Ouyang C,Ran P,Yang P,Liu Z

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2017

[View more Flow references on thermofisher.com](#)

## More applications with references on thermofisher.com

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