

# CD49b (Integrin alpha 2) Monoclonal Antibody (HMa2), eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotope	Armenian hamster / IgG
Class	Monoclonal
Type	Antibody
Clone	HMa2
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage Conditions	4° C
RRID	AB_467282

Applications	Tested	Dilution	Published
Flow Cytometry (Flow)	✓	0.5 µg/test	4 Publications
Western Blot (WB)	-		1 Publication
Immunohistochemistry (Frozen) (IHC (F))	✓	Assay-Dependent	1 Publication
Functional Assay (FN)	✓	Assay-Dependent	
Immunoprecipitation (IP)	✓	Assay-Dependent	

## Product Specific Information

**Description:** The HMA2 monoclonal antibody reacts with mouse CD49b, the 150 kDa integrin alpha2 subunit. The complex of CD49b non-covalently associated with integrin beta1 (CD29), also known as VLA-2, is a receptor for collagen and laminin. This complex is expressed by some CD4<sup>+</sup> T cells, IEL, NK cells, platelets and epithelial cells.

**Applications Reported:** The HM alpha2 antibody has been reported for use in flow cytometric analysis, immunoprecipitation, and immunohistochemical staining of frozen tissue (IHC-F). It has also been reported for use in in vitro functional assays (Please use Functional Grade purified HMA2, cat. 16-0491, in functional assays.).

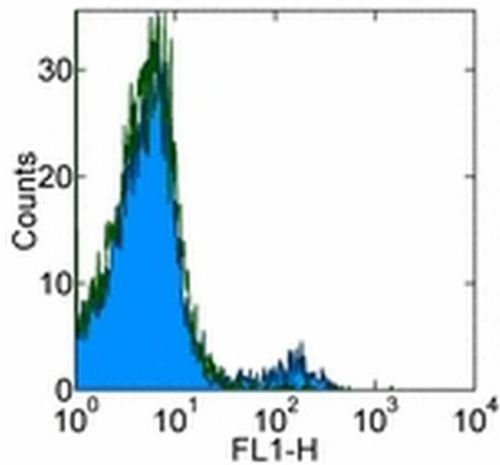
**Applications Tested:** The HM alpha2 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.5 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be 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.

Purity: Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

## Product Images For CD49b (Integrin alpha 2) Monoclonal Antibody (HMa2), eBioscience™



### CD49b (Integrin alpha 2) Antibody (14-0491-82) in Flow

Staining of BALB/c splenocytes with 0.25 µg of Armenian Hamster IgG Isotype Control Purified (Product # 14-4888-81) (open histogram) or 0.25 µg of Anti-Mouse CD49b Purified (filled histogram) followed by Anti-Armenian Hamster IgG FITC (Product # 11-4111). Cells in the lymphocyte gate were used for analysis.

[View more figures on thermofisher.com](http://thermofisher.com)

## 6 References

### Flow Cytometry (4)

Journal of cellular and molecular medicine

#### Cytochrome P450 26A1 modulates natural killer cells in mouse early pregnancy.

"Published figure using CD49b (Integrin alpha 2) monoclonal antibody (Product # 14-0491-82) in Flow Cytometry"  
Authors: Meng CY, Li ZY, Fang WN, Song ZH, Yang DD, Li DD, Yang Y, Peng JP

**Species**  
Mouse  
Not Applicable

**Dilution**  
Not Cited  
Not Cited

**Year**  
2017

Cellular and molecular immunology

#### The breast tumor microenvironment alters the phenotype and function of natural killer cells.

"Published figure using CD49b (Integrin alpha 2) monoclonal antibody (Product # 14-0491-82) in Flow Cytometry"  
Authors: Krneta T, Gillgrass A, Chew M, Ashkar AA

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2016

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

### Western Blot (1)

Journal of cellular and molecular medicine

#### Cytochrome P450 26A1 modulates natural killer cells in mouse early pregnancy.

"Published figure using CD49b (Integrin alpha 2) monoclonal antibody (Product # 14-0491-82) in Flow Cytometry"  
Authors: Meng CY, Li ZY, Fang WN, Song ZH, Yang DD, Li DD, Yang Y, Peng JP

**Species**  
Mouse  
Not Applicable

**Dilution**  
Not Cited  
Not Cited

**Year**  
2017

### Immunohistochemistry (Frozen) (1)

Oncotarget

#### Free ISG15 triggers an antitumor immune response against breast cancer: a new perspective.

"14-0491 was used in Immunohistochemistry to provide a basis for developing strategies to increase systemic levels of free ISG15 in order to treat cancer patients overexpressing the ISG15 pathway."  
Authors: Burks J, Reed RE, Desai SD

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2015

### More applications with references on thermofisher.com

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