

# CD11b Monoclonal Antibody (M1/70), eBioscience™

## Product Details

Size	100 µg
Species Reactivity	Mouse
Published Species	Rabbit, Bat, Fish, Mouse, Human
Host/Isotype	Rat / IgG2b, kappa
Class	Monoclonal
Type	Antibody
Clone	M1/70
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_467108

Applications	Tested Dilution	Publications
Western Blot (WB)	-	3 Publications
Immunohistochemistry (IHC)	-	61 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:100	1 Publication
Immunohistochemistry (PFA fixed) (IHC (PFA))	-	5 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	10 Publications
Immunocytochemistry (ICC/IF)	-	35 Publications
Flow Cytometry (Flow)	0.25 µg/test	531 Publications
ELISA (ELISA)	-	1 Publication
Immunoprecipitation (IP)	Assay-Dependent	2 Publications
Neutralization (Neu)	Assay-Dependent	7 Publications
Functional Assay (FN)	Assay-Dependent	3 Publications
Inhibition Assays (IA)	-	1 Publication
In vitro Assay (IV)	-	2 Publications
Miscellaneous PubMed (Misc)	-	7 Publications

## Product Specific Information

Description: The M1/70 monoclonal antibody reacts with mouse CD11b, the 165-170 kDa integrin alphaM. CD11b non-covalently associates with CD18 to form alphaMbeta2 integrin (Mac-1) and binds to CD54 (ICAM-1), C3bi, and fibrinogen. Mac-1 is expressed by macrophages, NK cells, granulocytes, activated lymphocytes and mouse B-1 cells in the peritoneal cavity. M1/70 is also cross-reactive to human CD11b, and can be used for the detection of this antigen on human peripheral blood monocytes, granulocytes, and a subset of NK cells. Through interactions with its ligands, CD11b participates in adhesive cell interactions.

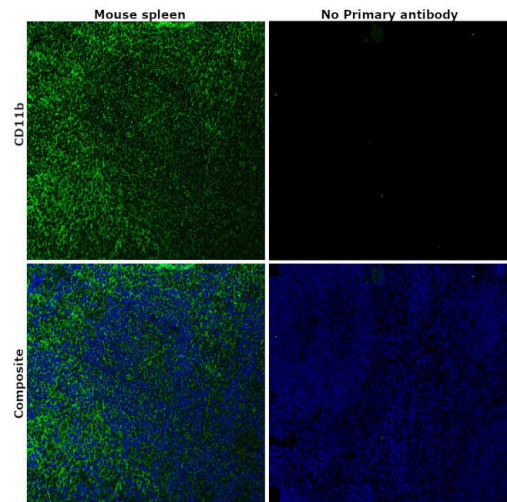
**Applications Reported:** The M1/70 antibody has been reported for use in flow cytometric analysis, immunoprecipitation, and immunohistochemical staining of frozen tissue. The M1/70 clone is not recommended for immunohistochemical staining of formalin-fixed paraffin embedded tissue. M1/70 has also been reported in in vitro blocking of CD11b function. (Please use Functional Grade purified M1/70, Product # 16-0112 , in functional assays.).

**Applications Tested:** The M1/70 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.25 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.

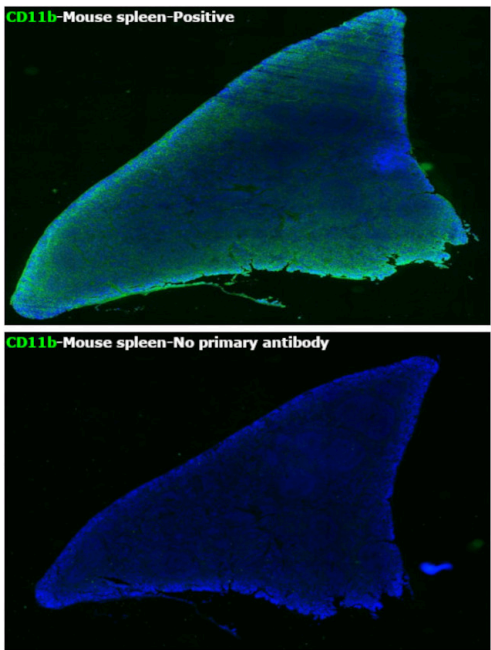
**Aggregation:** Less than 10%, as determined by HPLC.

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



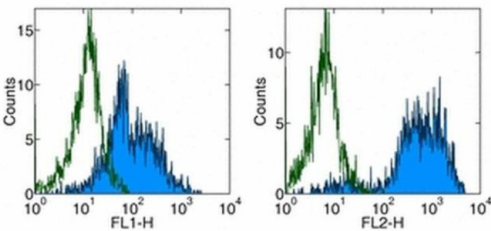
**CD11b Antibody (14-0112-82) in IHC (P)**

Immunohistochemical analysis of CD11b was performed using formalin-fixed paraffin-embedded mouse spleen tissue sections. To expose the target protein, heat-induced epitope retrieval was performed on de-paraffinized sections using eBioscience™ IHC Antigen Retrieval Solution - Low pH (10X) (Product # 00-4955-58) diluted to 1X solution in water in a decloaking chamber at 110 degree Celsius for 15 minutes. Following antigen retrieval, the sections were blocked with 2% normal goat serum in 1X PBS for 45 minutes at room temperature and then probed with or without CD11b Monoclonal Antibody (M1/70), eBioscience™ (Product # 14-0112-82) at 1:100 dilution in 0.1% normal goat serum overnight at 4 degree Celsius in a humidified chamber. Detection was performed using Goat anti-Rat IgG (H+L) Cross-Adsorbed Secondary Antibody, Alexa Fluor 488 (Product # A11006) at a dilution of 1:2000 in 0.1% normal goat serum for 45 minutes at room temperature. Nuclei were stained with DAPI (Product # D1306) and the sections were mounted using ProLong™ Glass Antifade Mountant (Product # P36984). The images were captured on EVOS™ M7000 Imaging System (Product # AMF7000) at 20X magnification.



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**CD11b Antibody (14-0112-82) in Flow**

Staining of mouse bone marrow with Anti-Mouse CD11b FITC (left) and PE (right). Appropriate isotype controls were used (open histogram). Cells in the myeloid population were used for analysis.

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Western Blot (3)

Cells	Year 2022
<b>Influence of the Postmortem/Storage Time of Human Corneas on the Properties of Cultured Limbal Epithelial Cells.</b>	
"Published figure using CD11b monoclonal antibody (Product # 14-0112-82) in Western Blot"	
Authors: Le-Bel G,Desjardins P,Gross C,Cortez Ghio S,Couture C,Germain L,Guérin SL	
Bioengineered	Year 2021
<b>Circular RNA SMEK1 promotes neuropathic pain in rats through targeting microRNA-216a-5p to mediate Thioredoxin Interacting Protein (TXNIP) expression.</b>	
"Published figure using CD11b monoclonal antibody (Product # 14-0112-82) in Western Blot"	
Authors: Xin Y,Song X,Ge Q	

View more WB references on thermofisher.com

Immunohistochemistry (61)

Journal of experimental & clinical cancer research : CR	Year 2023
<b>Chronic psychological stress promotes breast cancer pre-metastatic niche formation by mobilizing splenic MDSCs via TAM/CXCL1 signaling.</b>	Species Mouse
"14-0112-82 was used in Immunohistochemistry-immunofluorescence to investigate the impact of chronic psychological stress on breast cancer growth, metastasis, and pre-metastatic niche (PMN) formation."	
Authors: Zheng Y,Wang N,Wang S,Zhang J,Yang B,Wang Z	
MedComm	Year 2022
<b>Single-cell transcriptomics reveals distinct cell response between acute and chronic pulmonary infection of <i>Pseudomonas aeruginosa</i>.</b>	Species Mouse
"Published figure using CD11b monoclonal antibody (Product # 14-0112-82) in Immunohistochemistry"	
Authors: Hu X,Wu M,Ma T,Zhang Y,Zou C,Wang R,Zhang Y,Ren Y,Li Q,Liu H,Li H,Wang T,Sun X,Yang Y,Tang M,Li X, Li J,Gao X,Li T,Zhou X	Dilution 1:50

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- IHC (P) (1)
- IHC (PFA) (5)
- IHC (F) (10)
- ICC/IF (35)
- Flow (531)
- ELISA (1)
- IP (2)
- Neu (7)
- FN (3)
- IA (1)
- IV (2)
- Misc (7)

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