

# PRODUCT INFORMATION

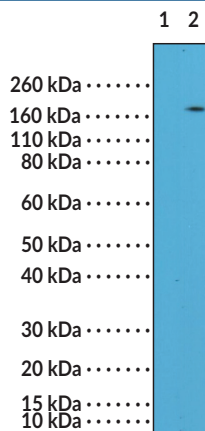
## ITGAM/CD11b (C-Term) Rabbit Monoclonal Antibody (Clone RM290)

Item No. 32241

### Overview and Properties

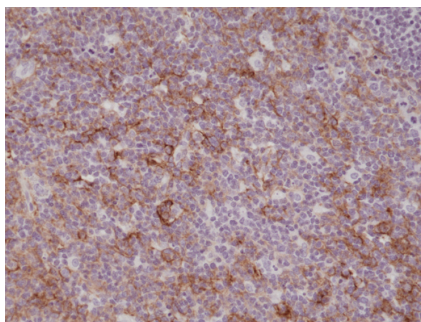
<b>Contents:</b>	This vial contains 100 µl of protein A-affinity purified monoclonal antibody.
<b>Synonyms:</b>	Cell Surface Glycoprotein MAC-1 Subunit α, Complement Component 3 Receptor 3 Subunit, CR3A, Integrin subunit αM, ITGAM, MAC-1
<b>Immunogen:</b>	Peptide from the C-terminal region of human CD11b
<b>Cross Reactivity:</b>	(+) CD11b
<b>Species Reactivity:</b>	(+) Human
<b>Form:</b>	Liquid
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	≥1 year
<b>Storage Buffer:</b>	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
<b>Clone:</b>	RM290
<b>Host:</b>	Rabbit
<b>Isotype:</b>	IgG
<b>Applications:</b>	Immunohistochemistry (IHC) and Western blot (WB); the recommended starting dilution is 1:100-1:200 for IHC and 1:200-1:500 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

### Images



Lane 1: HL60 cell lysates untreated  
Lane 2: HL60 cell lysates treated

WB of HL60 cell lysates untreated or treated with DMSO using ITGAM/CD11b (C-Term) Rabbit Monoclonal Antibody (Clone RM290) at a dilution of 1:400.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human tonsil tissue using ITGAM/CD11b (C-Term) Rabbit Monoclonal Antibody (Clone RM290) at a 1:200 dilution.

**WARNING**  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

**SAFETY DATA**  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

**WARRANTY AND LIMITATION OF REMEDY**  
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## Description

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CD11b, also known as integrin  $\alpha$ M (ITGAM), is a protein subunit of the heterodimeric leukocyte integrin  $\alpha$ M $\beta$ 2, the major integrin expressed in phagocytes with roles in host defense.<sup>1</sup> It is composed of an ectodomain containing a  $\beta$ -propeller domain followed by a thigh domain and calf-1 and calf-2 domains, a transmembrane segment, and a cytoplasmic tail.<sup>1,2</sup> CD11b is expressed as a component of  $\alpha$ M $\beta$ 2 on the surface of leukocytes, including macrophages, dendritic cells, monocytes, neutrophils, natural killer cells, and granulocytes, that binds to ICAM and VCAM to facilitate macrophage extravasation, as well as complement C3-opsonized pathogens and immune complexes to mediate their internalization and phagocytosis.<sup>1</sup> Mutations in *ITGAM* are associated with susceptibility to systemic lupus erythematosus (SLE).<sup>3</sup> Cayman's ITGAM/CD11b (C-Term) Rabbit Monoclonal Antibody (Clone RM290) can be used for immunohistochemistry (IHC) and Western blot (WB) applications.

## References

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1. Bednarczyk, M., Stege, H., Grabbe, S., *et al.*  $\beta$ 2 Integrins—multi-functional leukocyte receptors in health and disease. *Int. J. Mol. Sci.* **21(4)**, 1402 (2020).
2. Adair, B.D., Xiong, J.-P., Alonso, J.L., *et al.* EM structure of the ectodomain of integrin CD11b/CD18 and localization of its ligand-binding site relative to the plasma membrane. *PLoS One* **8(2)**, e57951 (2013).
3. Fagerholm, S.C., MacPherson, M., James, M.J., *et al.* The CD11b-integrin (*ITGAM*) and systemic lupus erythematosus. *Lupus* **22(7)**, 657-663 (2013).

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