

# CD29 (Integrin beta 1) Monoclonal Antibody (eBioHMB1-1 (HMB1-1)), NovaFluor™ Red 685, eBioscience™

Product Details	
Size	100 µg
Host/Isotype	Armenian hamster / IgG
Class	Monoclonal
Type	Antibody
Clone	eBioHMB1-1 (HMB1-1)
Conjugate	NovaFluor™ Red 685
Excitation/Emission Max	637/685 nm
Form	Liquid
Concentration	0.1 mg/mL
Storage conditions	4° C, store in dark, DO NOT FREEZE!

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.2 µg/test	-

## Product Specific Information

**Description:** The eBioHMB1-1 monoclonal antibody reacts with mouse and rat CD29 (integrin beta 1), a 110-120 kDa member of the beta integrin family expressed by leukocytes, endothelial, smooth muscle and epithelial cells. CD29 binds non-covalently with the alpha integrins CD49a-f to form the VLA-1 through VLA-6 complexes, as well as with CD51. These alpha-beta integrin heterodimers are capable of mediating a variety of cellular responses including adhesion, trafficking, proliferation and differentiation. All integrins which include CD29 bind to extracellular matrix proteins including collagen, laminin, fibronectin and vitronectin, whereas some CD29-containing integrins can also interact with cellular receptors such as VCAM-1 and MadCAM-1.

**Applications Reported:** This eBioHMB1-1 (HMB1-1) antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This eBioHMB1-1 (HMB1-1) antibody has been tested by flow cytometric analysis of mouse bone marrow cells. This can be used at less than or equal to 0.2 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.

NovaFluor dyes are not compatible with DNA intercalating viability dyes. Do not use viability dyes such as propidium iodide, 7-actinomycin D (7-AAD) and DAPI. Invitrogen LIVE/DEAD Fixable Dead Cell stains are recommended for use with NovaFluor dyes.

Each NovaFluor conjugate or kit is shipped with CellBlox Blocking Buffer. Use this buffer whenever staining with NovaFluor conjugates, including single-color compensation controls using cells. Whenever possible, we recommend adding CellBlox Blocking Buffer to antibody cocktails/master mixes prior to combining with cells. Add 5 µL per sample (regardless of the number of NovaFluors in your panel) to use the antibody cocktail as intended. For single-color controls, use 5 µL of CellBlox Blocking Buffer per 100µL of cell sample containing 10<sup>3</sup> to 10<sup>8</sup> cells.

NovaFluor conjugates are based on Phiton™ technology utilizing novel nucleic acid dye structures that allow for engineered fluorescent signatures with consideration for spillover and spread impacts. Learn more

Excitation: 637 nm; Emission: 685 nm; Laser: 633-640 nm (Red) Laser

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.