

Mouse anti-Human alpha 5 beta 1 Integrin Antibody | anti-IgG1 antibody

Anti-alpha 5 beta 1 Integrin [M200 (Volociximab)], Mouse IgG1

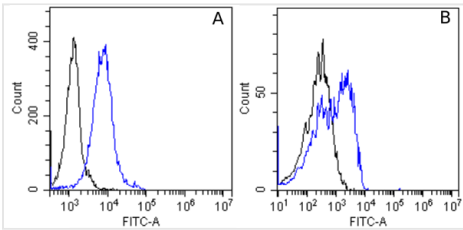
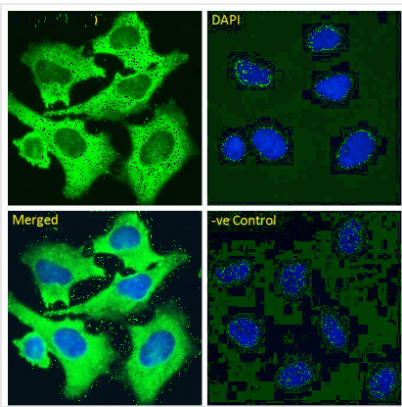
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA72236	Mouse	Human	Immunohistochemistry, Immunofluorescence, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

alpha 5 beta 1 Integrin; Anti-alpha 5 beta 1 Integrin [M200 (Volociximab)]; Mouse IgG1; Fibronectin receptor; CD49 antigen-like family member E; Integrin alpha-F; VLA-5; CD49e; anti-IgG1 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Isotype	Mouse IgG1, Kappa
Clone Number	M200 (Volociximab)
Specificity	The antibody binds to human alpha5beta1 integrin with a Kd of 0.367 nM (determined by Biacore), an EC50 of 0.2 nM and an IC50 of 2.3 nM.
Purity/Purification	Protein A affinity purified
Form/Format	PBS with 0.02% Proclin 300.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-IgG1 antibody	IHC (Immunohistochemistry), Blocking, IF (Immunofluorescence), FCM/FACS (Flow Cytometry), ELISA
Immunogen	Heterodimeric alpha5beta1Fc fusion protein
Chimeric Use Statement	This is a research-grade biosimilar. This chimeric mouse antibody was made using the variable domain sequences of the original Human IgG4 format, for improved compatibility with existing reagents, assays and techniques.
Preparation and Storage	Store at 4 degree C for up to 3 months. For longer storage, aliquot and store at -20 degree C.



FCM/FACS (Flow Cytometry)
Flow-cytometry using the anti-alpha 5 beta 1 Integrin M200 (Volociximab) (AAA72236) PBMC's (A) and U93 cells (B) were stained with unimmunized rabbit IgG antibody (black line) or the rabbit-chimeric version of M200 (Volociximab) (AAA72236-23.0, blue line) at a concentration of 10 ug/ml for 30 mins at RT. After washing, bound antibody was detected using anti-rabbit IgG JK (FITC-conjugate) antibody (129936) at 2 ug/ml and cells analyzed on a FACSCanto flow-cytometer.

IF (Immunofluorescence)
Immunofluorescence staining of fixed HeLa cells with anti-alpha 5 beta 1 Integrin antibody M200 (Volociximab) (AAA72236) Immunofluorescence analysis of paraformaldehyde fixed HeLa cells, permeabilized with 0.15% Triton stained with the chimeric rabbit IgG version of M200 (AAA72236-23.0) at 10 ug/ml for 1h followed by Alexa Fluor 488 secondary antibody (1 ug/ml), showing cytoplasmic and membrane staining. The nuclear stain is DAPI (blue). Panels show from left-right, top-bottom AAA72236-23.0, DAPI, merged channels and a negative control. The negative control was stained with unimmunized rabbit IgG followed by Alexa Fluor 488 secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-IgG1 antibody	The antibody binds specifically to alpha5beta1 integrin, which is part of the superfamily of glycoprotein transmembrane receptors for ligands such as fibronectin, vitronectin, laminins and collagens. The alpha5beta1 integrin receptor plays a key role in cellular processes such as inflammation, cell proliferation, angiogenesis and tumour metastasis. Comprising the variable domain of the original mouse antibody, a chimeric mouse:human IgG4 version of this antibody has been tested in vivo: In cynomolgus monkeys with laser-induced choroidal neovascularization (CNV), in rabbit models and in human volunteers. The antibody reached Phase II clinical trials with PDL Biopharma and Biogen-Idec.
Product Categories/Family for anti-IgG1 antibody	immunology; cancer; angiogenesis; biosimilar
References	Ramakrishnan et al. Preclinical evaluation of an anti-alpha5beta1 integrin antibody as a novel anti-angiogenic agent. J Exp Ther Oncol. 2006;5(4):273-86. PMID:17024968

NCBI AND UNIPROT INFORMATION

NCBI GI #	56237029
NCBI GeneID	3678
NCBI Accession #	NP_002196.2
NCBI GenBank Nucleotide #	NM_002205.2
UniProt Accession #	P08648; Q96HA5
Molecular Weight	114,536 Da
NCBI Official Full Name	integrin alpha-5
NCBI Official Synonym Full Names	integrin, alpha 5 (fibronectin receptor, alpha polypeptide)
NCBI Official Symbol	ITGA5
NCBI Official Synonym Symbols	FNRA; CD49e; VLA5A
NCBI Protein Information	integrin alpha-5; VLA-5; integrin alpha-F; CD49 antigen-like family member E; fibronectin receptor subunit alpha; fibronectin receptor, alpha subunit; very late activation protein 5, alpha subunit

UniProt Protein Name	Integrin alpha-5
UniProt Gene Name	ITGA5
UniProt Synonym Gene Names	FNRA
UniProt Entry Name	ITA5_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/mouse-igg1-human-antibody/alpha-5-beta-1-integrin/72236>