

Product Datasheet

Integrin alpha 5 beta 1 Antibody (M200 (Volociximab)) - Chimeric - Azide and BSA Free NBP2-52680-0.2mg

Unit Size: 0.2 mg

Store at 4C for up to 3 months. For longer storage, aliquot and store at -20C.

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NBP2-52680-0.2mg

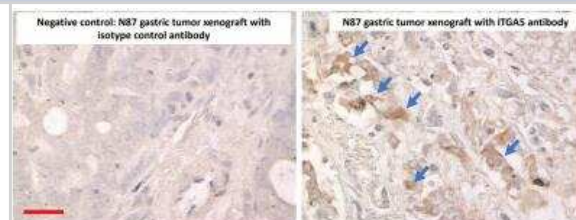
Integrin alpha 5 beta 1 Antibody (M200 (Volociximab)) - Chimeric - Azide and BSA Free

Product Information	
Unit Size	0.2 mg
Concentration	1 mg/ml
Storage	Store at 4C for up to 3 months. For longer storage, aliquot and store at -20C.
Clonality	Monoclonal
Clone	M200 (Volociximab)
Preservative	0.02% Proclin 300
Isotype	IgG Kappa
Purity	Protein A purified
Buffer	PBS
Product Description	
Host	Rabbit
Gene ID	3678
Gene Symbol	ITGA5
Species	Human
Specificity/Sensitivity	The antibody binds to human (alpha)5(beta)1 integrin with a Kd of 0.367 nM (determined by Biacore), an EC50 of 0.2 nM and an IC50 of 2.3 nM.
Immunogen	Heterodimeric alpha 5 Beta 1 Fc fusion protein
Product Application Details	
Applications	ELISA, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Block/Neutralize, CyTOF-ready, Immunofluorescence
Recommended Dilutions	Flow Cytometry 1:10 - 1:1000, ELISA 1:100 - 1:2000, Immunohistochemistry 1:10 - 1:500, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin, Immunofluorescence 1:10 - 1:500 Blocking/Neutralizing 50 - 200 molar excess, CyTOF-ready, Block/Neutralize
Application Notes	This antibody is Cytof ready. NOT FOR THERAPEUTIC USE - This is a research-grade biosimilar. This chimeric rabbit antibody was made using the variable domain sequences of the original Human IgG4 format, for improved compatibility with existing reagents, assays and techniques. Use in ICC/IF was reported in scientific literature (PMID: 30611716). The antibody binds specifically to Integrin alpha 5 beta 1, which is part of the superfamily of glycoprotein transmembrane receptors for ligands such as fibronectin, vitronectin, laminins and collagens. The Integrin alpha 5 beta 1 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. Use in IHC reported in scientific publication PMID: 32449990. Integrin alpha 5 beta 1 Antibody validated for Immunohistochemistry-Paraffin from a verified customer review.

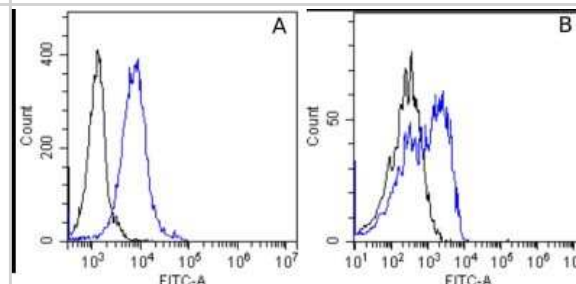


Images

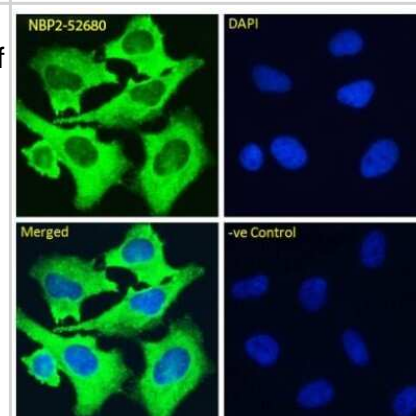
Immunohistochemistry-Paraffin: Integrin alpha 5 beta 1 Antibody (M200 (Volociximab)) - Chimeric [NBP2-52680] - N87 human gastric tumor xenograft immunostained with isotope control antibody (left panel) or 1:200 dilution of Integrin alpha 5 beta 1 antibody (right panel). Arrows indicate DAB immunoreactivity. Red scale bar = 10 microns. Image from verified customer review.



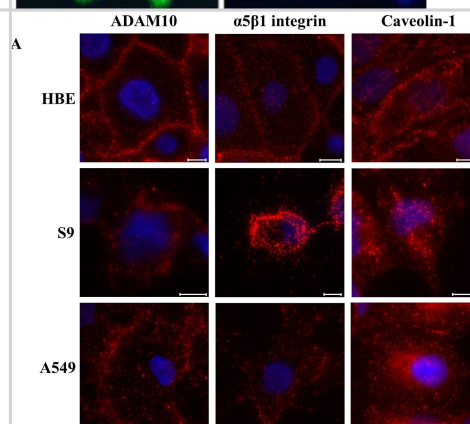
Flow Cytometry: Integrin alpha 5 beta 1 Antibody (M200 (Volociximab)) - Chimeric [NBP2-52680] - Flow-cytometry using the anti-alpha 5 beta 1 Integrin M200 (Volociximab). PBMC's (A) and U93 cells (B) were stained with unimmunized rabbit IgG antibody (black line) or the rabbit-chimeric version of M200 (Volociximab) (NBP2-52680, 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 at 2 ug/ml and cells analyzed on a FACSCanto flow-cytometer.



Immunofluorescence: Integrin alpha 5 beta 1 Antibody (M200 (Volociximab)) - Chimeric [NBP2-52680] - Immunofluorescence staining of fixed HeLa cells with anti-alpha 5 beta 1 Integrin antibody M200 (Volociximab). Immunofluorescence analysis of paraformaldehyde fixed HeLa cells, permeabilized with 0.15% Triton stained with the chimeric rabbit IgG version of M200 (NBP2-52680) 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 NBP2-52680, DAPI, merged channels and a negative control. The negative control was stained with unimmunized rabbit IgG followed by Alexa Fluor 488 secondary antibody.



Abundance of two potential Hla receptors and of caveolin-1 as a potential pore-stabilizing factor.A: Representative examples of immune fluorescence assays using epifluorescence microscopy (nuclei counterstained using DAPI) that were performed on 16HBE14o-, S9 or A549 cells grown on coverslips using antibodies against ADAM10, the alpha5beta1 integrin or against caveolin-1. Staining appearing in red represents specific labelling of the respective proteins. Scale bars: 10 um. Image collected and cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/32470006>), licensed under a CC-BY licence.



Publications

Phillips AT, Boumil EF, Castro N Et al. USP10 Promotes Fibronectin Recycling, Secretion, and Organization Investigative ophthalmology & visual science 2021-10-04 [PMID: 34665194] (Human)

Ludwig BS, Tomassi S, Di Maro S et al. Pharmacological Inhibition of Brain EGFR Activation By a BBB-penetrating Inhibitor, AZD3759, Attenuates alpha-synuclein Pathology in a Mouse Model of alpha-Synuclein PropagationThe organometallic ferrocene exhibits amplified anti-tumor activity by targete Biomaterials 2021-03-12 [PMID: 33756215] (ICC/IF, Human)

Moller N, Ziesemer S et al. S. aureus alpha-toxin monomer binding and heptamer formation in host cell membranes - Do they determine sensitivity of airway epithelial cells toward the toxin? PLoS One 2020-05-30 [PMID: 32470006] (FLOW, Human)

Smith PC, Metz C, de la PeNa A et al. Galectin-8 mediates fibrogenesis induced by cyclosporine in human gingival fibroblasts J. Periodont. Res. 2020-05-25 [PMID: 32449990] (IHC, Human)

Li L, Hu X, Eid JE et al. Mutant IDH1 Depletion Downregulates Integrins and Impairs Chondrosarcoma Growth Cancers (Basel) 2020-01-06 [PMID: 31935911] (Human)

Laurenzana A, Margheri F, Biagioni A, et al EGFR/uPAR interaction as druggable target to overcome vemurafenib acquired resistance in melanoma cells EBioMedicine. 2019-01-02 [PMID: 30611716] (ICC/IF, Human)





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Products Related to NBP2-52680-0.2mg

HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
210-TA-005	TNF-alpha [Unconjugated]
7728-A5-050	Integrin alpha 5 beta 1

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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