

# Product Datasheet

## Integrin beta 1/CD29 Antibody (12G10) - BSA Free NB100-63255-0.025mg

Unit Size: 0.025 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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**NB100-63255-0.025mg**

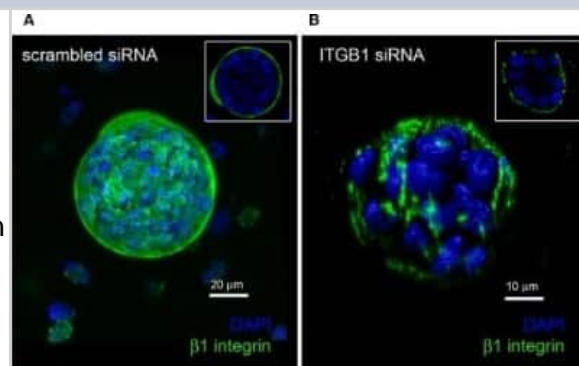
Integrin beta 1/CD29 Antibody (12G10) - BSA Free

Product Information	
Unit Size	0.025 mg
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	12G10
Preservative	0.09% Sodium Azide
Isotype	IgG1
Purity	Protein G purified
Buffer	PBS
Product Description	
Host	Mouse
Gene ID	3688
Gene Symbol	ITGB1
Species	Human
Reactivity Notes	Predicted cross-reactivities: Mink, Rabbit
Marker	Stem Cell Marker
Specificity/Sensitivity	NB100-63255 recognises the human beta1 integrin. This has been shown to bind to a ligand induced binding site, binding being increased in the presence of fibronectin ligand. This also enhances alpha 5 - beta 1 - fibronectin interactions.
Immunogen	Purified human beta1 integrin preparation from HT1080 fibrosarcoma cell extract
Product Application Details	
Applications	ELISA, Flow Cytometry, Immunohistochemistry, Immunohistochemistry-Frozen, Knockdown Validated
Recommended Dilutions	Flow Cytometry 1:25-1:50, ELISA 10 ug/mL, Immunohistochemistry 1:10-1:500, Immunohistochemistry-Frozen 1:10-1:500, Knockdown Validated

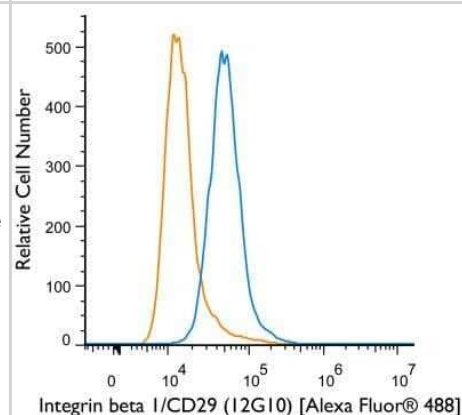


## Images

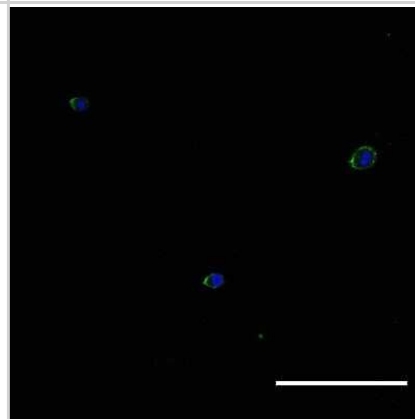
**Immunocytochemistry/Immunofluorescence: Integrin beta 1/CD29 Antibody (12G10) [NB100-63255]** - Quantification of knockdown of Beta1 integrin in hS/PC microstructures. hS/PC microstructures formed in HA-based hydrogels and were transfected with scrambled siRNA or ITGB1 siRNA. Immunocytochemistry was used to determine Beta1 integrin expression and spatial distribution of Beta1 integrin 46 h post-transfection. Image analysis software was used to quantify Beta1 integrin expression at microstructure surfaces from confocal micrographs and coverage indices were calculated for scrambled siRNA (A) and ITGB1 siRNA (B) groups where a 63% reduction in Beta1 integrin expression at microstructure surfaces was quantified. Image collected and cropped by CiteAb from the following publication (<https://www.frontiersin.org/article/10.3389/fcell.2019.00224/full>) licensed under a CC-BY license.



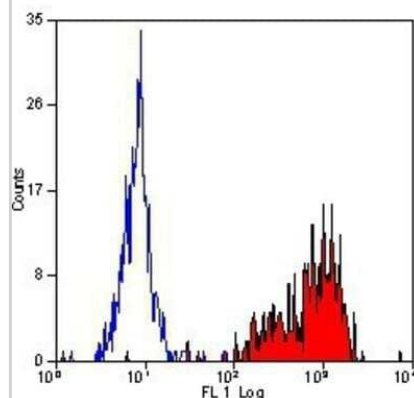
**Flow Cytometry: Integrin beta 1/CD29 Antibody (12G10) [NB100-63255]** - Flow Cytometry: Integrin beta 1/CD29 Antibody (12G10) [Alexa Fluor 488] [NB100-63255AF488] - A cell surface stain was performed on A549 cells with Integrin beta 1/CD29 (12G10) antibody NB100-63255AF488 (blue) and a matched isotype control NBP1-97005AF488 (orange). Cells were incubated in an antibody dilution of 5 ug/mL for 20 minutes at room temperature. Both antibodies were conjugated to Alexa Fluor 488. Image using the Alexa Fluor 488 form of this antibody.



**Immunocytochemistry/Immunofluorescence: Integrin beta 1/CD29 Antibody (12G10) [NB100-63255]** - Human salivary gland progenitor cells express integrin beta 1 by day 1 in three-dimensional hyaluronan-based hydrogels. Image from verified customer review.



**Flow Cytometry: Integrin beta 1/CD29 Antibody (12G10) [NB100-63255]** - Staining of human peripheral blood monocytes with MOUSE ANTI HUMAN CD29.



## Publications

Hakanpää L, Abouelezz A, Lenaerts AS et al. Reticular adhesions are assembled at flat clathrin lattices and opposed by active integrin  $\alpha 5 \beta 1$  The Journal of cell biology 2023-08-07 [PMID: 37233325]

Wu D, Witt RL, Harrington DA, Farach-Carson MC Dynamic Assembly of Human Salivary Stem/Progenitor Microstructures Requires Coordinated  $\alpha 1 \beta 1$  Integrin-Mediated Motility Front Cell Dev Biol 2019-10-16 [PMID: 31750298] (WB, ICC/IF, Human)



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### 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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