

# Product Datasheet

## Integrin beta 2/CD18 Antibody (1B4) - Chimeric - Azide and BSA Free NBP3-09040-0.2mg

Unit Size: 0.2 mg

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

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**NBP3-09040-0.2mg**

Integrin beta 2/CD18 Antibody (1B4) - Chimeric - Azide and BSA Free

Product Information	
Unit Size	0.2 mg
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	1B4
Preservative	0.02% Proclin 300
Isotype	IgG Kappa
Purity	Protein A purified
Buffer	PBS
Product Description	
Host	Rabbit
Gene ID	3689
Gene Symbol	ITGB2
Species	Human, Rhesus Macaque
Specificity/Sensitivity	Specific to the beta chain of the leukocyte integrin beta-2 family. This is found in LFA-1, Mac-1 and p150.95 among others. Binds an epitope distinct from the C3bi binding site. Has been shown to recognise both the human and Rhesus monkey antigen.
Immunogen	Blood was obtained from 4 healthy donors and the mononuclear cells harvested and grown. A BALB/c mouse was injected with $10^6$ monocytes three times at monthly intervals, and four times with $5 \times 10^6$ monocytes on each of the four days before fusion. The spleen cells were then fused to P3U1 myeloma cells to generate hybridomas and RIA was used to identify lines of interest.
Product Application Details	
Applications	ELISA, Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunoprecipitation, Radioimmunoassay
Recommended Dilutions	Flow Cytometry, ELISA, Immunocytochemistry/Immunofluorescence, Immunoprecipitation, Radioimmunoassay



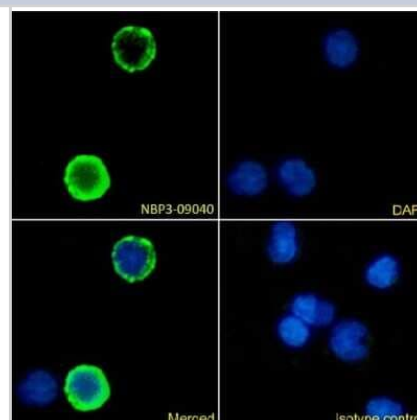
**Application Notes**

This chimeric rabbit antibody was made using the variable domain sequences of the original Mouse IgG2a format, for improved compatibility with existing reagents, assays and techniques.

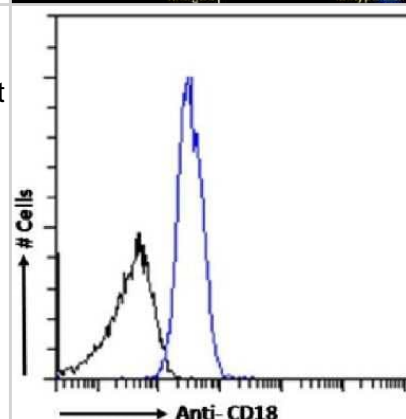
The main application 1B4 has been proposed for is its anti-inflammatory activity. It has been shown to work as a Fab fragment prepared by papain digestion (Wright et al, 1983). Its binding to antigen was confirmed by RIA (Van Voorhis et al, 1983). 1B4 has been shown to work in Rhesus monkeys, and has reduced immunogenicity once humanized. 1B4 is also compatible with immunofluorescence which has been used to demonstrate that the fine specificity of the combining sites was not altered by humanization (Singer et al, 1993). It has been shown to prevent polymorphonuclear (PMN)-dependent pathology in animal models of hemorrhagic shock, dermal inflammation, reperfusion injury, IBD and meningitis (Vedder et al, 1988, Vedder et al, 1990, Mileski et al, 1990, Carlos et al, 1990, Tuomanen et al, 1989, Arfors et al, 1987, Wallace et al, 1991, Wallace et al, 1992). The glycosylation patterns of 1B4 have also been studied in detail using NMR, ES-MS, HPAEC-PAD mapping and glycosyl composition analysis (Yu Ip et al, 1994).

**Images**

**Immunocytochemistry/Immunofluorescence: Integrin beta 2/CD18 Antibody (1B4) - Chimeric [NBP3-09040] - Immunofluorescence analysis of paraformaldehyde fixed human peripheral blood monocytes immobilized on Shi-fix(TM) cover-slips and stained with the chimeric rabbit IgG version of 1B4 (NBP3-09040) at 10 ug/ml followed by Alexa Fluor(R) 488 secondary antibody (2 ug/ml), showing membrane staining in a subset of cells. The nuclear stain is DAPI (blue). Panels show from left-right, top-bottom NBP3-09040, DAPI, merged channels and an isotype control. The isotype control was stained with anti-Fluorescein antibody followed by Alexa Fluor(R) 488 secondary antibody.**



**Flow Cytometry: Integrin beta 2/CD18 Antibody (1B4) - Chimeric [NBP3-09040] - Human peripheral blood leukocytes were stained with anti-Fluorescein IgG antibody (4-4-20; isotype control, black line) or the rabbit IgG1 version of 1B4 (NBP3-09040, blue line) at a dilution of 1:100 for 1h at RT. After washing, bound antibody was detected using a goat anti-mouse IgG AlexaFluor(R) 488 antibody at a dilution of 1:1000 and cells analyzed using a FACSCanto flow-cytometer.**





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### **Products Related to NBP3-09040-0.2mg**

HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-52351-0.05mg	Recombinant Human Integrin beta 2/CD18 His Protein
210-TA-005	TNF-alpha [Unconjugated]

### **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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