# **Product Datasheet**

# Fc gamma RIII (CD16) Antibody (3G8) - Chimeric - BSA Free NBP3-21452-0.2mg

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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# NBP3-21452-0.2mg

Fc gamma RIII (CD16) Antibody (3G8) - Chimeric - BSA Free

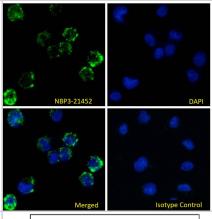
| Fc gamma RIII (CD16) Antibody (3G8) - Chimeric - BSA Free |  |
|---|--|
| Product Information                                       |  |
| Unit Size   | 0.2 mg   |
| Concentration   | 1 mg/ml  |
| Storage   | Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.   |
| Clonality   | Monoclonal   |
| Clone   | 3G8  |
| Preservative  | 0.02% Proclin 300  |
| Isotype   | IgG Kappa  |
| Purity  | Protein A purified   |
| Buffer  | PBS  |
| Product Description                                       |  |
| Description   | This chimeric rabbit antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.  |
| Host  | Rabbit   |
| Gene ID   | 2214   |
| Gene Symbol   | FCGR3A   |
| Species   | Human, Chimpanzee, Baboon, Cynomolgus Monkey, Rhesus Macaque   |
| Reactivity Notes  | Expected to react with Pigtailed Macaque, Capuchin Monkey, Squirrel Monkey, Sooty Mangabey, Cotton-topped Tamarin, Marmoset.   |
| Specificity/Sensitivity                                   | This antibody binds to CD16 at an epitope which is not the IgG-binding site. This antibody cannot distinguish between CD16a transmembrane isoform found on the surface of NK cells and macrophages (which can trigger the cytolytic response), and the GPI-linked CD16b isoform present on neutrophils or soluble CD16 found in the plasma. CD16 is the low affinity IgG receptor III and binds to aggregated IgG or IgG-antigen complex which functions in NK cell activation, phagocytosis and ADCC (antibody-dependent cell-mediated cytotoxicity). |
| Immunogen   | Human PMN (polymorphonuclear leukocytes) cells.  |
| Product Application Details                               |  |
| Applications  | Flow Cytometry, Immunocytochemistry/ Immunofluorescence,<br>Immunohistochemistry, Immunoprecipitation, Surface Plasmon Resonance<br>(SPR), Block/Neutralize  |
| Recommended Dilutions                                     | Flow Cytometry, Immunohistochemistry, Immunocytochemistry/<br>Immunofluorescence, Immunoprecipitation, Block/Neutralize, Surface Plasmon<br>Resonance (SPR)  |
| Application Notes   | This antibody was used to construct a recombinant bispecific scFv (bsscFv) along with the mAb clone F3.3 anti-HLA class II antibody (connected by a (Gly4Ser)4 linker)which was expressed in SF21 insect cells. This bsscFv allows NK cells to target malignant B lymphoid cells and mediates effector cell lysis (ASCC) of the malignant cells (also lysis of primary leukaemia samples). 3G8 is also able to block neutrophil phagocytosis and stimulates NK cell proliferation, and can be used in FC, SPR, IP and IHC studies.                     |

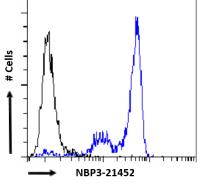


### **Images**

Immunocytochemistry /Immunofluorescence: Fc gamma RIII (CD16) Antibody (3G8) - Chimeric - BSA Free [NBP3-21452] - Immunofluorescence analysis of paraformaldehyde fixed U937 cells permeabilized with 0.15% Triton and stained with NBP3-21452 at 10 ug/ml for 1h followed by Alexa Fluor488 secondary antibody (2 ug/ml), showing membrane staining. The nuclear stain is DAPI (blue). Panels show from left-right, top-bottom NBP3-21452, DAPI, merged channels and an isotype control. The isotype control was stained with an anti-unknown specificity antibody followed by Alexa Fluor488 secondary antibody.

Flow Cytometry: Fc gamma RIII (CD16) Antibody (3G8) - Chimeric - BSA Free [NBP3-21452] - Human peripheral blood leukocytes were fixed using 2% PFA, permeabilised using 0.5% Triton and stained with unimmunized rabbit IgG antibody (isotype control, black line) or NBP3-21452 (blue line) at a dilution of 1:100 for 1h at RT. After washing, bound antibody was detected using a goat anti-rabbit IgG AlexaFluor 488 antibody at a dilution of 1:1000 and cells analyzed using a FACSCanto flow-cytometer.







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# Products Related to NBP3-21452-0.2mg

HAF008 Goat anti-Rabbit IgG Secondary Antibody [HRP]

NB7160 Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]

210-TA-005 TNF-alpha [Unconjugated]

1960-FC-050 Fc gamma RIII (CD16) [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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