Product Data Sheet

Brilliant Violet 605™ anti-human CD41

Catalog # / Size:	2118705 / 25 tests 2118710 / 100 tests
Clone:	HIP8
Isotype:	Mouse IgG1, κ
Reactivity:	Human, Non-human primate, Other
Preparation:	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 605™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 605™ and unconjugated antibody.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Workshop Number:	IV P38
Concentration:	Lot-specific

Human peripheral blood platelets were stained with anti-human CD41 (clone HIP8) Brilliant Violet 605™ (filled histogram) or mouse IgG1, κ Brilliant Violet 605™ isotype control (open histogram)

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 605™ excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 605™ is a trademark of Sirigen Group Ltd.

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Application Notes: Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections and blocking of platelet aggregation[2]. The HIP8 antibody has been reported to block the activation of platelets by various stimuli, including collagen, and ADP.

Application References:

1. Knapp W, *et al.* 1989. Leucocyte Typing IV. Oxford University Press. New York.
2. McCarty OJT, *et al.* 2000. *Blood* 96:1789.
3. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
4. Zhi L *et al*. 2013. *PLoS One*. 8:e79869. (IHC)

Description: CD41 is a 125/25 kD α subunit of the gpIIb/IIIa (CD41/CD61) complex. CD41 is a heterodimer composed of a heavy chain (gpIIbα) and light chain (gpIIbβ) linked by a single disulfide bond. It is a member of the integrin family primarily expressed on platelets and megakaryocytes. CD41 has been reported to be involved with platelet aggregation and platelet attachment to the ECM. CD41/CD61 complex acts as the receptor for fibrinogen, fibronectin, Von Willebrand factor, and thrombin.

Antigen References:

1. Denzin L, *et al.* 1996. *J. Exp. Med.* 184:2153.
2. Denzin L, *et al.* 1995. *Cell* 82:155.
3. Riberdy J, *et al.* 1994. *J. Cell Biol.* 125:1225.