Technical Data Sheet

BV421 Mouse Anti-Human CD235a

Product Information

Material Number:	562938
Alternate Name:	Glycophorin-A; GYPA; GPA; PAS-2; MN sialoglycoprotein; Sialoglycoprotein A
Size:	50 tests
Vol. per Test:	5 µl
Clone:	GA-R2 (HIR2)
Isotype:	Mouse IgG2b, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The GA-R2 (also known as HIR2) monoclonal antibody specifically binds to CD235a, otherwise known as Glycophorin A (*GYPA*, *GPA*), PAS-2, MN sialoglycoprotein (MNS, MN), and Sialoglycoprotein A/alpha. CD235a is a type I transmembrane sialoglycoprotein that is expressed on human erythrocytes, erythroid precursor cells and certain leukemic cell types. This antibody is useful for the identification and characterization of erythrocytes, certain myeloid leukemic cell types, and studies of erythroid cell development and infectious diseases with erythrocyte involvement. Mature, non-nucleated red blood cells characteristically express very high levels of glycophorin A.

The antibody was conjugated to BD HorizonTM BV421 which is part of the BD HorizonTM Brilliant VioletTM family of dyes. With an Ex Max of 407-nm and Em Max at 421-nm, BD HorizonTM BV421 can be excited by the violet laser and detected in the standard Pacific BlueTM filter set (eg, 450/50-nm filter). BD HorizonTM BV421 conjugates are very bright, often exhibiting a 10 fold improvement in brightness compared to Pacific BlueTM conjugates.



Flow cytometric analysis of CD235a expression on human peripheral blood erythrocytes. Whole blood was stained with BD Horizon™ BV421 Mouse anti-Human CD235a antibody (Cat. No. 562938; solid line histogram) or with a BD Horizon™ BV421 Mouse IgG2b, κ Isotype Control (Cat. No. 562748; dashed line histogram). The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of erythrocytes. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with BD Horizon[™] BV421 under optimum conditions, and unconjugated antibody and free BD Horizon[™] BV421 were removed.

Application Notes

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Flow cytometry	try Routinely Tested							
Suggested Com	panion Produc	ts						
Catalog Number	Name	Name					Clone	
562748	BV421	BV421 Mouse IgG2b, к Isotype Control				50 μg	27-35	
554656	Stain Bu	Stain Buffer (FBS)				500 ml	(none)	
BD Biosciences								
United States Canada 877.232.8995 800.979.	Europe 9408 32.53.720.550	Japan 0120.8555.90	Asia Pacific 65.6861.0633	Latin America/Car 55.11.5185.9995	ibbean			
For country contact info	rmation, visit bdbiosc	ences.com/contac	t					
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Product Notices

- This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1×10^{6} cells in a 100-µl experimental 1. sample (a test).
- Source of all serum proteins is from USDA inspected abattoirs located in the United States. 2
- An isotype control should be used at the same concentration as the antibody of interest. 3.
- 4. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before 5. discarding to avoid accumulation of potentially explosive deposits in plumbing.
- 6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
- 7. Pacific BlueTM is a trademark of Molecular Probes, Inc., Eugene, OR.
- Brilliant Violet[™] 421 is a trademark of Sirigen. 8.

References

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